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*I, the undersigned being an officer duly authorized in accordance with the provision of the Patent Act, 1970 hereby certify that annexed hereto is the true copy of the **Application, Provisional Specification and Drawing Sheets** filed in connection with Application for Patent No. **137/Del/2004** dated **28th January 2004**.*

Witness my hand this 4th day of May 2005.

(S.K. PANGASA)

Joint Controller of Patents & Designs

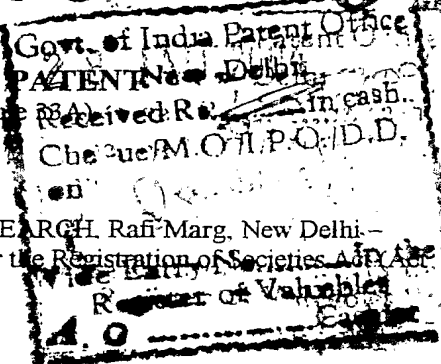
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0137 DEL 0
FORM 1
THE PATENTS ACT, 1970
(39 of 1970)

APPLICATION FOR GRANT OF PATENT

(See sections 5(2), 7, 54 and 135 and rule 83A)



1. We, COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, Rafi Marg, New Delhi - 110001, India, an Indian registered body incorporated under the Registration of Societies Act XXX of 1860)
2. Here by declare:
(a) that we are in possession of an invention titled :

"A Novel Method Of Standardization Of Chemical And Therapeutic Values Of Foods And Medicines And Pathological Properties/Conditions In Biological Samples By Chromatographic Fingerprinting"

- (b) that the Provisional / ~~Complete~~ specification relating to this invention is filled with this application;
- (c) that there is no lawful ground of objection to the grant of patent to us;

3. Further declare that inventor(s) for the said invention is / are:
Dadala VIJAYAKUMAR and Kondapuram VIJAYA RAGHAVAN of the Indian Institute of Chemical Technology, Hyderabad-500007 Andhra Pradesh and both are Indian Citizens.
4. We claim the priority from the applications filed in convention countries, particulars of which are as follows.

Not applicable

5. We state that the said invention is an improvement in or modification of the invention, the particulars of which are as follows and of which we are the applicants:
(a) Patent application no.:
(b) Patent application Date:
6. We state that the application is divided out of our application, the particulars of which are given below and pray that this application deemed to have been filed on under section of the act.
(a) Patent application no.:
(b) Date of filing provisional and / or complete specification...and...
7. That we are the assignee of the true and first inventor(s).
8. That our address for service in India is as follows:

Head, IPM Division, CSIR,
INSDOC Building, 14 Satsang Vihar Marg,
New Delhi - 110067
Phone: 26962560, 2696 8819; Fax: 2696 8819.

9. Following declaration was given by the inventor(s):

I / We the true and first inventor(s) for this invention declare that the applicants herein is / are my / our assignee:

Dated this 28th day of JANUARY, 19/2004

Name (in full with expanded initials)

DADALA VIJAYKUMAR

KONDAPURAM VIJAYA RAGHAVAN

Signature of the true and first inventor(s)

10. That to the best of our knowledge, information and belief the fact and matters stated herein are correct and that there is no lawful ground of objection to the grant of patent to us on this application.

11. Followings are the attachment with the application:

☒ (a) Provisional / Complete specification (3 copies).

☒ (b) Drawings (3 copies).

(c) Priority document(s).

☒ (d) Statement and Undertaking on FORM-3.

(e) Power of authority.

☒ (f) Fee Rs 3000/- in Cheque no.: 734665 dated: 5/12/03 on State Bank of India, New Delhi Main Branch, Parliament Street, New Delhi - 110 001.

We request that a patent may be granted to us for the said invention.

Dated this 28th day of JANUARY, 19/2004

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SCIENTIST

Intellectual Property Management Division,
Council of Scientific and Industrial Research.

डॉ. ए. वी. पी. सिन्हा
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To,
The Controller of Patents,
The Patent Office, New Delhi.

FORM 2
THE PATENTS ACT -1970

0137-04

28 JAN 2004

PROVISIONAL SPECIFICATION

(See Section 10)

**A NOVEL METHOD OF STANDARDIZATION OF CHEMICAL AND
THERAPEUTIC VALUES OF FOODS, MEDICINES, PATHOLOGICAL
PROPERTIES/CONDITIONS IN BIOLOGICAL SAMPLES AND DIFFERENT
NATURAL AND SYNTHETIC MATERIALS BY CHROMATOGRAPHIC
FINGERPRINTING**

**COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH
Rafi Marg, New Delhi -110 001, India, an Indian Registered Body
Incorporated under the Registration of Societies Act (XXI of 1860)**

The following specification particularly describes the nature of the invention and the manner in which it is to be performed.

A Novel Method of Standardization of Chemical and Therapeutic Values of Foods, Medicines, Pathological Properties/ Conditions in Biological Samples and different natural and synthetic materials By Chromatographic Fingerprinting.

FIELD OF INVENTION

The present invention relates to a novel method of assessment of chemical and therapeutic properties of foods and traditional medicines using chromatographic finger printing useful for Chemical and therapeutic standardization. More particularly the present invention relates to organic, organo-metallic, metallic and metallo complex molecules which have absorptive or emission property of electromagnetic radiation presented in the form of Contour and 3-D stable and motion graphics present in natural or man made foods or medicines used as a single or formulated materials, for chemical and therapeutic standardization. The analysis of biological samples like blood indicated the utility of the method for clinical pathological conditions of healthy and diseased.

The present invention is a novel method of the development and utilization of the Contour and 3-D chromatograms of a herbal medicine and formulation developed under standardized experimental (chemical and instrumental) conditions which is proposed as a novel method of chromatographic finger printing for medicines to achieve the chemical and therapeutic standardization. When the molecular weight, refractive index, emission and absorbance properties of electromagnetic radiation of different energies by the analyte samples and the polarity are measured at specific temperature, pH, Viscosity, ionic nature of the media and volatility using suitable detectors, the properties of the analyte molecule will be known which in turn explains the energy of the analyte and its relation with a specific efficacy. When the molecular weight of the molecule having specific polarity and structure is analyzed with its absorption and emission properties of any electromagnetic radiation, under varying physical properties like its mass, temperature, volatility and viscosity, ionic media the chemical and therapeutic properties are assessed qualitatively and quantitatively leading to the assessment of their efficacy.

BACKGROUND AND PRIOR ART REFERENCES

In the world many foods and drugs are used as a part of life for dietary, nutritional and therapeutic purposes. In India the traditional customs and social activities include, use of Ayurveda, Siddha and other Traditional Indian system of medicines to maintain the general health of people. In countries where traditional philosophies were practiced most of the day-to-day activities will be included with some kind of traditional customs. Being the most intelligent animal, man might not have made any thing mandatory for the next generations with out any purpose. Being responsible and affectionate to the next generations to keep them healthy and happy he might have proposed some discipline in the life style. But this will be understood only by the generations who created that discipline. Due to his personality man had mis-used, mis-interpreted and misguided the next generations for his own benefits regarding some of these traditions in due course of time. Thus some of such traditions might have made the human life miserable. Reaching a status of universalization the present scientific community should create awareness about the excellence of the traditions and medicines and revalidate if required and bring a better living atmosphere for the future generations. It is moral and ethical responsibility of the mankind to do so. By doing so man will not go back to history, but gain the knowledge which has already been created and established.

In almost all world traditional medicines the basic physicochemical properties of the medicines were used to understand the chemical and therapeutic quality and efficacy of the medicines. Similarly the physicochemical parameters of the human body (Dhatu) and its various parts were well correlated by similar properties of the medicines. Thus a disease was identified and a suitable medicine having the similar properties was selected.

The basic parameters like Tridoshas (Pitta, Kapha and Vata) used in traditional medicine are understood to be categorized based on chemical properties of the material and the same was proved by the method we reported earlier (PCT/IN/000123). When the same property, dosha is deficient, sufficient or excess to body to weight ratio, it is called dosha (defect). The optimum (energy in the body) amount of property (Pitta, Kapha and Vata) is considered to be healthy, more or less than normal are considered to be doshas (defects) under imbalanced conditions of tridoshas leads to diseases manifestation.

In the present invention we report improved and new features of the method to assess the efficacy of foods and drugs used in the day-to-day life, which are helpful for accurate analysis and also to assess the clinical pathological properties of biological materials like blood.

The evidences of a well-organized system of medicine in India were traced in Harappa and Mohanzadaro (History of Medicine in India, Dr Priya Vrit Sharma). In the Indus valley civilization, a system of medicine has prevailed, in which drugs of vegetable, animal and mineral origin were used. The OSADHISUKTA of the Rigveda is the oldest document of the knowledge about plants and herbal medicines. Medicine in India owes much to the traditional knowledge of Atharvaveda of which Ayurveda is said to be a upaveda. A large number of disease-syndrome relationships were defined and described by Charaka and Susruta in their medical treatises 'The Samhitas'. The treatment was also prescribed in a systematic manner and on rational basis.

On the other hand, it was realized that the biological phenomena couldn't be universally explained by mechanical means as each individual varies in his basic constitution i.e., Prakruthi that must be kept in mind while prescribing diet or drug to the patient. The BINARY concept like Prakriti-Purusha (in Ayurveda), Yin-Yang (in Chinese medicine), Normal-Abnormal was seen in almost all philosophies.

After going through the ancient literature it was found that the medicines were standardized using their physico- chemical properties of the materials. The color, texture, odor and taste were used as a measure of the efficacy of any medicine. When the medicines were analyzed using the method of Chromatographic Fingerprinting many generalizations and correlation were observed to be matching with traditional methods of drug standardization and therapeutic utility. They were explained with examples in the later pages of the present document.

The ancient man after many years of evolution tried to understand the nature. He started using the naturally available flora and fauna for his daily needs, in which he used the geological, plant and animal material for his dietary and health needs. Many a time some of the foods and drugs found to be beneficial for health, he made it mandatory to be used for the next generations to use under the name of TRADITIONS in day to day life

and in many cultural and social activities to pass on the benefits of the medicine enjoyed by them to the later generations.

Many a time the present generations follow the health and social rules and regulations as suggested by their elders under the name of customs/traditions. No food or drug will be used/administered without any merit in it because improvement of mind and health is a continuous process. Even though generations, who developed these customs might only be able to understand the real science of these traditions the generations who could not understand may not be able to understand them (Traditions). The benefit and value of these customs will be enjoyed and accepted by the later generations, when they are well understood, practiced, rationally studied and explained scientifically. Otherwise the traditions become mere rituals without serving any purpose.

It cannot be ruled out that some misinterpretations and misconceptions might have been added in due course of time. They could be removed by studying the same with rational and scientific methods and confirm and understand the real science behind in the traditional philosophies.

Many dietary habits were explained in the Dinacharya (Daily Activity/habits) and Ruthucharya (Seasonal Activity/habits) (Ritucharya, K.M.Shyam Sunder and Balasubrahmanyam, Center for Knowledge Systems, Chennai, India) to prevent formation of diseased status of the human being. Thus traditional philosophies have many preventive methods along with curative methods in traditional philosophies while dealing with human health. Because it is known that a large human population in the world cannot be maintained with curative medicines. It is thus prescribed, "Prevention is better than Cure".

The major drawback appears to be that what is the scientific basis of the traditional concepts used for establishing the relation of the properties of the medicines with different diseases of the human being and even animals is understandable. If this can be rationally answered most of the drug discovery problems could be solved. Another very important method practiced in traditional philosophies, which was not understandable for the modern generations, was the basis of the individualist nature of the human being and diseases for selection of suitable medicines taking both in to consideration. Thus if we can understand the chemistry behind the traditional concepts used for diagnosis and to know the efficacy

of the medicines and correlate their physico chemical properties, the drug standardization, drug designing, drug monitoring and drug targeting become easy and understandable. In Indian traditional philosophies the concept of PRAKRITHI explains how the constitution of a human body varies from person to person, time to time, age to age and place to place. Analysis of blood samples of persons of different prakrithi show that the prakrithi concept has a basis of chemistry as understood in medicines. Figures of blood samples shown in the later part of the present document show how the concept of Prakrithi is related to Physico chemical properties of the biological substances.

The pharmacopoeial methods being practiced for the traditional medicines were not established based on the basic concepts of traditional medicines. Hence, a method of analysis to analyze the medicines with out deviating from the basic concepts is proposed. The selection, application and treatment using traditional medicines has a specific philosophical guidelines. Hence the method of standardization should also have the same basis. The present pharmacopoeial methods do not have this correlation. Two different protocols should not be used for the same purpose.

In modern science the chemical and therapeutic properties were understood by studying the constituent molecules present in drugs and foods, which can be broadly, classified in to three categories the High Polar, Medium Polar and the Non-Polar molecules like a band spectrum which will have ability to respond to different electromagnetic radiations. The total polarity of the molecule depends on the total Electrophilic and Nucleophilic moieties attached to the molecule along with the unsaturation of the molecules by their conjugation. These molecules will change their properties under different conditions like temperature, pH, pressure, viscosity and polarity of constituents and ionic or non-ionic media in which they are present. The living human body, animal body and plants will also contain the same type of molecules where in different polar molecules will carry out different functions. Diseases were cured using the medicines of same polarity as that of the disease causing chemical constituents, i.e the molecules which can create the disorder when present abnormally high or low amounts can cure the same disorder, as said Similia Similus Curator by Dr Heinemann.

Existing methods of drug standardization:

We have reported a novel method of standardization using chromatographic fingerprinting (PCT/IN/00123) for standardization of medicines. Before explaining the proposed method of standardization, the existing methods of standardization (Chemical & therapeutic) and chromatographic finger printing are discussed below. More detailed studies were incorporated in the present method. Table 1 shows different types of standardization methods used in traditional and modern medical philosophies. There is a correlation between the chemical standardization with the therapeutic standardization in traditional methods. The traditional practitioner can assess the efficacy of the medicine using traditional methods. Where as modern method does not have these correlations. If one can correlate, then the drug discovery become accurate and less complicated.

A. Prior art on chemical standardization:

i) Traditional:

The great sage CHARAKA explained in his CHARAKA SAMHITA "*The understanding of the totality of an entity does not arise from a fragmentary knowledge of it*". (CHARAKA SAMHITA Vi. 4.5). This makes it clear that standardization and therapeutic efficacy of any medicine in which all the constituents present in, are not taken into consideration is futile. This indicates that the efficacy of the medicines is due to the totality of the constituents but will not be due to any single constituent. Thus when a molecule is separated from a mixture of constituents it loses the required original efficacy."

Traditional herbalists used to select a medicine based on the organoleptic methods available at that time like color, texture, smell and taste by which they used to assess the chemical and therapeutic efficacy of a medicine. The similar properties were used to diagnose the disease and in a patient to select suitable medicine. They were selecting suitable medicines useful for the specific individual. These methods involve intrinsic knowledge and understanding of the inter and intra therapeutic interactions of the medicines and body constituents to cure diseases. This knowledge varies from individual to individual and depends on the individual skill and ability of the practitioner or philosopher. Practically it will be difficult to provide a rational basis and understanding in terms of modern chemical terms for any mechanism to explain, using personified methods.

Hence modern science uses instruments for various purposes, which eliminates the individual factors and facilitates reproducibility in data and information. Most of the times it is the energy of the disease and medicine dealt with for curing the disease. Thus measuring the energy help to over come this problem.

Hence to understand the therapeutic efficacy of a medicine or food, one needs to understand their physical and chemical properties. In the ancient times people use to understand these properties using the organoleptic methods like the taste, the smell and the color of the materials. The basic properties classified were 1.Taste (Rasa), 2.Quality (Guna) 3.Potency (Virya) 4.Post assimilative status and effect of the constituents (Vipaka) and 5.Special action (Prabhava, medicines with same chemical properties but different therapeutic efficacies). The properties of these parameters are found to be related to their physico chemical properties measurable in the form of chemical properties.

It is these three factors namely, the Doshas (Disorders), the Dhatus (constituents) and the Malas (excreta) that are mainly dealt for curing a disease or a disorder. If the above-mentioned properties of the medicines tally with the dosha, it will be vitiated or balanced, thus the disease is cured.

In traditional philosophies Dosha is a term used generally to describe the status of a property when it is healthy or diseases. When the same property is present in a changed, imbalanced form then also it is said to be Dosha (Deranged).

The selection and use of drugs according to Ayurvedic basic principles vary from one situation to another according to doshic predominance of the patient. In other words there is a relation between the medicinal properties (Dravya Gunas) and disorders (doshas). Addition or deletion of one or more drugs may be necessitated to treat an identical disease in the patients with different individual disorders or combination of disorders. Hence, Ayurvedic pharmacotherapy is more individualistic according to dosha predominance of the patient and not generalized as in the case of modern medicine. Identification of Tridoshas properties (Rasa, Guna, Veerya, Vipaka and Prabhava) compatible to disorders (doshas) is unique and more reliable in Ayurvedic Pharmacotherapy. In the traditional philosophy of India about 41 properties (Gunas) were explained which will help to understand the efficacy of the medicines on the diseased conditions. Table 2-4, Shadrasa

Nighantu show the classification of different medicines are classified in to different groups based on taste. The selection of the most suitable medicine for a specific taste and efficacy was done from any of the plants available. These tables show groups of herbal medicines classified in to groups based on chemical properties like taste with indicated therapeutic efficacy.

Charaka the traditional philosopher has classified a set of 10 medicines for a specific property of the efficacy. Dashaimani was observed to be a classification of medicines based on the therapeutic property. The Table 5 of Charakas Maha Kashaya Dashaimani shows how different medicines of different botanical classes were grouped for a specific therapeutic purpose. When the Chromatographic Fingerprints of medicines of one group were studied, it was observed that the classification was based on the chemical constituents having a specific physico chemical property like polarity and conjugative property and ability to respond for specific electromagnetic radiations. Table 6 shows some of the traditionally classified medicines (Ganoushadha varga) based on their different properties having commonality in efficacy.

In traditional medicines one of the basic parameters used for chemical and therapeutic standardization is 'Taste'. The interpretation of the taste against efficacy depends on the health of the individual. The taste felt by an individual will depend on the health of the individual. For example when a medicine having Bitter (Tikta Rasa) and Pungent taste (Katu Rasa) is consumed by an individual, based on the polarity of the taste molecule and the polarity of the taste receptor the respective message will be sent to brain after which the individual will express his observation. If the person is Pitta in nature and the medicine is bitter and pungent by taste he will observe that the Pungent is primary and the bitter is secondary by taste. If the same medicine is consumed by a Vata personality he will express Bitterness as primary taste and pungent as secondary. This indicates that the interaction between the taste receptor in the first case is more for pungent molecule and the respective taste receptor. The second will be more for bitter molecule and the respective taste receptor. The taste receptor polarity in each of the individual is not same hence the difference is observed. The response of the person will depend upon his health as on that moment which will change due to different factors. This method is generally used in

traditional philosophies to identify the Prakrithi of the patient as on that moment, for a better selection of the suitable medicine. Using present method of Chromatographic Fingerprinting the chemical properties of the molecule of a specific taste are studied and established the relation of taste with therapeutic efficacy of a medicine.

When large number of medicines single or formulations were analyzed it was observed that all the basic concepts in most of the traditional medicines were found to have a basis of chemistry. There will be variation in the properties of these doshas in medicines, man and animals. Thus there may not be a similar report of a specific taste by two different individuals for a medicine with a specific set of chemical constituents giving taste. This leads to opinion and chemical difference from person to person. Traditionally when herbal medicines are assessed for a specific taste and also for the main and subsidiary tastes. The main taste is the one, which is felt immediately after consumption. Subsidiary is the one, which is felt later. This is called Pradhana Rasa (First taste sensed / observed by an individual) and Anu Rasa (Secondary taste sensed / observed by an individual) concept. Due to this reason the personified tests like assessment of efficacy based on taste is considered as irrational due to its non reproducibility of the same response in any place and by any person at any time.

The Dosha Bhedas

The Doshas (Properties) in human body and medicines were understood at various levels and use to select a medicine suitable for a specific disease with specific energy. The different combinations of the properties of Tri Doshas are explained using the above combinations.

Different permutations and combinations of the Tri doshas leading to different patterns of the human being was explained in terms of DOSHA BHEDAS as shown in Tables 7. The energy absorbed or emitted by a sample at different conditions of temperature or pH when presented in one data will be able to explain the property of the sample under test, whether medicine or blood.

In traditional medicines the Tridoshas are categorized in to 63 states where in the Tridoshas (three energies) will be present in different permutations and combination of them. If one of the energy is deficient than optimum it is called Tara (Deficient) and if it is

excessive it is called Tama (Excessive) and if it is sufficient it is called Sama (Equivalent). Three energies will be varying in their quantitative level based on the influencing factors like genetic, ecological and geological conditions, temperature, pH, Viscosity and humidity etc. One, two or three of these energies will be varying in a system leading to different states of energies. Ultimately the medicines should bring a Sama, the equilibrium status of the energy of all three doshas having the energies at required levels. These energies will be present in microorganism to Universe.

The ideal combination will be Sama dosha (required levels) of all three energies. But even this status will be not healthy as keeping all at equilibrium will lead to static condition which will not allow bio chemical pathways to activate.

a). Modern chemical standardization

The therapeutic activity of any food or drug will depend on its physical and chemical properties. It also depends on the physico chemical properties of the diseased human being or animal, which consumes the food or medicine. This response may vary from individual to individual. This needs to be understood. Thus understanding the chemical constituents using their physico-chemical properties of medicines will help to understand the therapeutic activity of the medicine.

Traditionally, the properties of the medicines and disease patterns in suffering and healthy humans were expressed in the traditional language, which is not understandable to the modern generations.

The physico chemical properties of the medicines play a major role on the therapeutic activity of the medicine. In modern science these properties of molecules can be understood and studied using many chemical parameters like, the molecular weight of analytes, polarity and conjugative properties leading to understand the energy system existing in the body and in medicines. Polarity is a resultant electrochemical property due to different electron donating (nucleophilic) and electron-accepting (electrophilic) moieties attached to the molecules along with the unsaturated double and triple bonds present in it influenced by an ionic or non-ionic media in which it exists. They will influence the rate of activity or reactivity of a molecule in chemical and biochemical reactions.

The second parameter that influences the activity of the molecule is the spatial arrangement of atoms leading to an asymmetric energy system in a molecule, which can create activity when it is present in a living system. Due to this reason the isomeric (Geometrical and optical isomers) molecules play an important role in the biological activity in the body where in, a large number of bio chemical pathways will be working simultaneously with out cross interactions and interference's. Hence the chemistry of CHIRAL DRUGS has become very important. Ultimately it is the total energy present in the molecule, which makes it therapeutically active. The molecular energy will depend on the energies of the atoms of the molecules, its geometry and the energy it can absorb and emit.

The total chemical profile compatible to the human body will be taken into consideration for standardization of therapeutic efficacy of the medicine. Hence in the present computer- based instrumental method, the total properties of all the constituents at different conditions are taken into consideration. The Chromatographic Fingerprints of the medicines were proposed as a visual tool and proof for many purposes of dealing with medicines. Before discussing the proposed method the existing methods of standardization are given below.

Existing analytical methods of chemical standardization:

Even though there are traditional methods for standardization of medicines, they are considered as irrational as they depend on the personal skills of the individual and his health and were not explained in the atomic and molecular terminology.

None of the existing methods of chemical analysis were able to correlate the physico chemical properties like taste, texture, odour and color as used traditionally to assess efficacy of the medicine. Traditional practitioners are able to assess the efficacy of the medicines based on such simple type of tests and select the medicine, which is therapeutically efficacious.

Most of the pharmaceutical analysis was done as reported in the official methods and pharmacopoeias. The chromatographic method involves a chromatogram with the peaks due to absorbance or emission of radiation at, specific wavelength by molecules eluted by a mobile phase on a separation column and the eluents detected by any suitable

detectors for detection. But when there are molecules present in the analyte samples having absorbance maxima at different wavelength values from 200-800nm or more, they cannot be detected. Thus the existing method is found to be not suitable for the analysis of herbal medicines. Also even after such analysis at single wavelength, there is no correlation between the analytical data and its efficacy in traditional terms. Where as the traditional chemical assessment like taste is indicating the efficacy of medicines. This art of assessment has been incorporated in the basic concepts of traditional philosophies by correlating the chemical properties with their therapeutic efficacy. The protocol used for drug selection and quality control should be same in any philosophy. The existing methods of standardization do not interpret the analytical data in traditional terms. The present method is proposed for this purpose. If the meaning of the traditional parameters could be explained in terms of the chemical properties, similar correlation could be achieved.

Usually the chromatographic analysis is done using a reference standard (Internal or External). With out a standard reference material, the analysis has no meaning because the PEAK of the chromatogram does not provide any kind of chemical properties of the compound eluted. Hence, the confirmation of the Qualitative and Quantitative properties (Spectral or Chemical) of the components with relation to their efficacy is unclear.

In the qualitative and quantitative analysis of medicines/drugs (Single or Formulation), the emphasis is given mainly on the spectral and chemical properties of the components eluted after analyzing the sample. The analysis is done based on the interaction of Electro magnetic radiation on the analytes (say the Ultra Violet and Visible radiation even up to Near Infrared radiation) and their response to it. In the existing method of chromatography, the analytical report i.e., the chromatogram under practice is not giving any of the chemical properties like polarity and relation to the efficacy of the analyte. The chromatogram is not able to show the traditional properties of the molecules, which does not absorb at that wavelength or have a different "Absorbance maxima" other than the set wavelength (say 225 or 254nm). If the sample is 100% pure and if it is a known molecule, then the analysis at a fixed wavelength is acceptable, but it is highly impractical in the case of herbal medicines where in more than one molecule is present absorbing at more than

one wavelength. Hence the existing method of chemical standardization was found to be not useful for the standardization of traditional medicines.

Hence any chromatogram presented at a specific wavelength is not able to provide the complete chemical profile of the ingredients present in a single medicine and a formulation. So, the chromatogram is partial in its report, and is not acceptable. Any analytical method, which is not giving complete information of the analysis, is scientifically not acceptable.

In the use of herbal medicines, the medicine as a whole is used with some standard therapeutic conditions prescribed in the ancient literature and scripts. Hence the concept of searching for an active ingredient is said to be unscientific and incomplete, because it is the total profile that is responsible for the medicinal property of the medicine.

It is already mentioned (Frank R Stermirtz et al., PANS/Feb 15,2000/Vol 97.No 4/pp 1433-1437) that, the synergy of the other constituents present along with the major constituent is equally important because the first will not be able to do its function with out the other constituents present in the extract as explained in the beginning.

In the present method of Chromatographic Fingerprinting it is shown that in a group of molecules of medicines the property of each of the molecules, will be influenced by the others surrounding it. Thus the polarity of a molecule will vary when it is present in between a cluster of molecules having different polarities due to field effect. Even the separation pattern will change on a chromatographic column when a molecule is analyzed singly and in a mixture. Figure 1 shows Different chromatographic features of a modern liquid chromatograph with PDA detector. Figure 2 shows the present method of chromatograms at different wavelengths.

B. Prior art on traditional therapeutic standardization:

The great Indian Medical sages have understood and defined the concept of Indian medicine by clearly defining the properties, constituents and humors of the living beings. They also understood the inter and intra relations amongst them. In almost all the traditional philosophies the basic concepts include the nature and its role on the humors of the human beings. It is said that the human body is made of seven types of constituents (Saptadhatu). The normal properties (Tridoshas) are of three types. The physico chemical

properties of any material in the universe are due to five elements (Pancha bhutas). The interactions of different permutation and combination of these elements will influence the health. Hence, the understanding of these properties will help to understand their physical and chemical properties and so there by, their therapeutic efficacies. The philosophers in different parts of world have also developed such concepts suitable for their science and society. In Tables 8-9 Of Rasa vs. Properties, the relation of properties and efficacy of the medicines is explained. The relation of panchabhutas and Rasas with the efficacy is also well explained in the traditional concepts of traditional medicines. Table 10 shows the relation of panchamahabhoothas and the biotransformation happening in every system of the universe. The same will happen in every part of the universe under suitable conditions. Tables 11,12 show the relation of Panchabhutas with different physicochemical properties.

In Indian traditional philosophies, herbal medicines have also been classified based on astrological parameters. The Table 13-15 of Astrological relation of plants and medicines shows the information.

i) Traditional Method:

In ancient times (pre samhita and pre Susruta period in India), the physicians used NADISASTRA (Science of reading pulse) to know the status of the TRIDOSHAS (Vata, Kapha and Pitta) at the time of diagnosis to know the health status of the patient. The specific type of pulse is studied to explain the type of disorder pre-dominant in the patient (Dr P.V.Sharma, History of Medicine in India, INSA,1992). Astastana pareeksha is one of such methods, which helps to understand the disease pattern of the patient. In traditional ayurvedic literature the morphological features of the plants were correlated with their physico chemical properties along with efficacy. Table 16 shows the same.

It is used to understand the type of dosha(s) predominant in the patient at the time of diagnosis and the respective dosha(s) to be vitiated to cure the disorder. But this art of reading NADI (Pulse) was confined to some people of high caliber, personal skill and ability with lot of discipline and experience. Hence, every traditional practitioner was not able to practice it.

The art of understanding the physico-chemical properties of the medicines and the humours of the human being was developed and standardized. The inter and intra relations of these properties with nature which influences health had been studied and standardized thus the art of pharmacology and pharmaco-therapeutics was developed by the physicians.

The therapeutic efficacy of a drug is defined as, 1) It is a substance that is capable of bringing about an (pharmacological) action in the human body (Kriyagunavat) and 2) This is due to the collective functioning of many factors, (samavayikaranam), just as a piece of cloth results because from its many component threads acting together,

In the world we see, there are two main types of living things, the plants and animals. It is also said that this world is made of five great elements i.e., Earth, Water, Air, Fire and Space (As said Panchabhutas in Ayurveda). The basic properties of these materials are of two types, Strong - Powerful and Mild - Soft. If we accede to this highly tenable logic we can say that in this world, all actions are due to different per mutational and combinational series of the above properties, giving a wide range of properties and materials varying in their intensity.

In the philosophy of most of the traditional medicines world over, the co-inherence of the nature of the five constituents is taken into consideration by which the body is made. They will help in understanding the disease or disorder of the patient. This coherence is called PRAKRITHI - PURUSHA in Ayurveda, Yin - Yang in Chinese medicine.

After the Panchabhoutic concept, the concept of Tridosha (Pitta, Kapha and Vata) plays a major role in the Indian traditional medicine and the seven constituents (Saptadhatu) by which the body is made up of. Tridoshas are mentioned to be present every part of the body and world. Table 17 shows how different diseases erupt due to the derangement of tridoshas and the root cause of the diseases. Traditionally these imbalances of tridoshas that will be looked in to, to cure any disease first. Figure 3 shows the relation of properties, Panchabhutas with three doshas. The balancing of the doshas are dealt like a balance.

Ayurveda believes in the holistic philosophy of life and emphasis is given for the prevention of diseases rather than curing of diseases. The holistic approach of ayurveda advocates that the soul, mind and the body are the three integral parts of life and when

these are in dynamic equilibrium and harmony, the state is called GOOD HEALTH (Arogya). When they are in disequilibrium and disharmony, the state is called DISEASE (Vaishamya). According to ayurveda, the physiological features of various systems are maintained in dynamic equilibrium status by TRIDOSHAS. In other words, harmony of tridoshas bestows good health, disharmony results to disease. Hence, most of the time the tridoshas are dealt with, in curing any disease.

Chinese medicine classifies the status of the human body as YIN and YANG representing sorrow and happiness. These factors are attributed for various properties of the medicines and living beings. The maintenance of these factors is done holistically by taking the role of chemical, physiological and social factors in to consideration. Most of the time the Chinese medicine has a direct or indirect relation with various BIO ENERGY centers located in the body. The art of acupuncture uses the same. The other factors reported in other philosophies, have resemblance with Chinese medicine.

After the drug it is the disease that should be dealt with for which the selection of drug is made for. A disease is defined as "Any thing that brings a sadness and grief to this person (Purusha). They are of four types 1.The accidental (Agantavaha) 2.The body born (Sarirah) 3.The Mind born (Manasah) and 4.The natural (Swabhavikah). It is for this reason, most of the traditional concepts deal with both psychosomatic factors to cure the disease along with a disciplined and standardized method of life. Hence disease is an expression of imbalance in doshas. If the tridoshas can be analyzed the correlation of the disease and medicines could be understood.

As said above, it is mostly considered as those bodily diseases having their source arise by the incompatibilities of the thridoshas Viz., Vata, Kapha and Pitta and blood individually or in combination with one another. But, the diseases like psychological are dealt in a different way. That is why any traditional philosophy considers all the psychosomatic factors in to consideration to deal with a disease. The individual properties of the doshas are explained as given below.

A detailed description of all the factors is given in our earlier patent for various philosophies in order to under stand more generally about different traditional medicines world over. Table 18 gives an concise description of the Indian Ayurvedic philosophy and

various components in it. Tables 19-21 show how the medicines were classified based on their physico chemical properties and efficacy.

ii) Modern method of therapeutic standardization:

The existing pharmacotherapy has not taken the above-mentioned concepts into consideration. Phytochemists are interested only in isolation, purification and structural elucidation of the active principles isolated from the plants and they passed on them to pharmacologists to study their biological activity. The pharmacologists in turn screen the molecule(s) for pharmacological activity, establish its mechanism(s) of action and substantially rate its efficacy in comparison with the existing standard drugs used in modern medicine.

This concept is in no way going to help the traditional medical practitioners since the isolation of the active principle(s) drastically change the holistic character of the medicines and their therapeutic efficacy.

Instead of assaying the solvent extraction fractions, active principles etc., obtained from the individual plants, the analysis of total extract from a medicine using a solvent compatible to the human cells and cell membranes of the body will be of much use to evaluate the pharmacological activity of such medicines.

In the modern clinical trials conducted for the therapeutic standardization they are done in three phases (four in the case of international utility), involving large number of people. The information regarding a new medicine to be submitted to Drug Controller generally consists of,

1. Chemical structure
2. Pharmacological class
3. Formulation details
4. Data on animals including data on toxicity studies
5. Data on clinical pharmacology including pharmacokinetics
(Behavior of the drug in the human body)
6. Pharmacodynamics (Actions of the drug inside the body)
7. Special studies and status of the drug in the rest of the world.
8. Data on Bio-Equivalence studies

But all the above studies are costly and time consuming. Basically, they will not be taking into account of the role of the ecological factors, the genetic discipline (as practiced in the Indian family and marriage relations), the psychological, the social and other variable parameters of the patient in to consideration. This will make the effectiveness of the drug limited to a particular group or genetic type of people.

The existing modern methods of chemical and therapeutic standardization will not explain the basic concepts of traditional medicine. The success of traditional medicines is due to the strength of the basic concepts. Hence if any method can explain the efficacy of the medicines using the basic concepts it will be useful.

As said in traditional concepts the thridoshas were not taken into consideration under drug discovery including the difference of the chemical constitution of each individual. Thus it is very specific to a particular group of human beings. It is this reason it commonly fails to act on a wide range of populations.

The predictive methods of standardization for therapeutic efficacy:

The Molecular modeling:

To solve the problem of finding a lead molecule of a specific efficacy, many methods of computational chemistry are under use. It has a limitation of being able to calculate for smaller molecules only. The present hardware needs extraordinary capability to do such work on molecules of higher volumes. The parameters like Electron densities (Charges), Electrostatic potential, Dipole (and higher multiple) moments, Molecular orbitals and normal and excited state needs to be calculated. In general The Molecular Orbital Theory (MO), Density Functional theory (DFT) Valance Bond theory (VB) is under use for such calculation of energies.

Lipinskys (Advanced Drug Delivery Reviews 23 (1997) 3-25) rule of 5 says that a molecule will be poor absorptive or permeative if

1. There are more Than Five Hydrogen Bonds
2. The Molecular Weight Is More Than 500
3. The Log P Is Over 5
4. There are more Than 10 Hydrogen Bond Acceptors And
5. Compound Classes That Are Subtracts For Biological Transporters Are Exceptions To The Rule.

Computational method being non practical, simulated and not developed in similar conditions as existing in human or animal body they will have many limitations. Efforts are made to understand the efficacy of a medicine using the atomic and molecular properties simulated in a computer (Computational Chemistry George P.Ford, In press). They are highly mathematical and predictive. The structure activity correlation also uses the method of mathematical modeling taking the molecular properties in to consideration. But mostly they are not 100% accurate and do not interpret the efficacy in terms of traditional concepts of traditional philosophies. The relation of different tastes with their efficacy was attempted to assess using such kind of modeling software's. The present method will help to understand the traditional parameters for understanding the relation of efficacy with the physico chemical properties of the constituents in the medicines.

When some medicines were studied using this type of software along with present method the results were of less conclusive. Figures 4-5.

The Retention activity correlations:

There are efforts to correlate the efficacy of the medicines with the retention of the molecules eluted on a chromatographic device. Almost all have used the subjective parameters like retention were used without much using the energy absorbed/emitted.

The adsorption phenomena happening during the process of separation of analyte molecules over a chromatographic media is similar to the pharmacodynamics of the medicines in human body. Many efforts are going on in predicting the efficacy of the medicines of unknown origin or of synthetic origin. The retention of the molecules was correlated with reported efficacy of a specific group of medicines with a common efficacy with many limitations. But the retention time of an elution of a molecule over a separation media will be influenced by many influencing factors, like properties of mobile phase, stationary phase, pH, temperature, viscosity and other physico chemical properties which influence the energy of the molecules under study, the medicines also undergo different changes similarly while they move through the body matter. Most of the researches were not accounted for the correlation of the energy absorbed or emitted with the efficacy of the molecule or medicine. Thus the present method has many advantages over the existing

method of chemical and therapeutic standardization. Some references related to this work is given in References 1-20.

SUMMARY OF THE INVENTION:

The present invention relates to a method for detection and identification of constituents of extracts of plants or animal, natural or synthetic sources possessing medicinal value and capable of responding (absorb or emit) to Electro Magnetic of radiation using chromatographic finger printing where in the said method comprising the steps of:

- i. extracting Organic, Organo-metallic and metallic atoms or molecules using suitable solvent.
- ii. subjecting the extract obtained in step (i) to the separation analysis based on pH, polarity under the influence of physical properties like temperature, viscosity and ionic media using a Chromatography technique under experimental conditions.
- iii. generating Contour and 3-D data graphs of the ingredients eluted based on conjugative and polarity properties qualitatively and quantitatively.
- iv. converting the, data thus obtained from step 'iii' in to a data image and analyzing the colored image based on the selection of various properties like polarity, mass and colors denoting the concentrations of the various constituents eluted with time having a specific energy detected on a detector which can measure the energy absorbed or emitted.
- v. generating a chromatogram based on the data and color analyzed, having different polarities at various retention times along with different physico chemical properties like conjugative and polarity properties of the analyte constituents eluted with time at different pH and temperatures.
- vi. generating data in the form of a 2-D and 3-D forms and divided in to different zones representing a specific energy and related to efficacy of the medicine, the division of the image is based on the polarity indicated on X axis and energy absorbed/emitted from an electromagnetic radiation interacted with matter under test indicated on Y-axis, where in the X and Y-axis are divided in to three zones based on polarity. The Z-axis represents quantity of Absorbance or emission at a specific condition.
- vii. identifying the compounds in the said molecules by the absorptive and emission properties of various constituents in the image related to a specific efficacy due to its action on a specific single or multiple pathways.

- viii. identifying, determining and classifying the constituents by the absorptive or emission of an electromagnetic, electrical or magnetic energy of the eluted constituents based on physico chemical properties like polar, medium polar and, less or non-polar properties and conjugation for chemical and therapeutic standardization of the sample analyzed.
- ix. generating a barcode for the data using the X, Y, Z and time coordinate properties of the data.
- x. generating a database of Chromatographic Fingerprints and barcodes and identifying the respective compounds of extract.
- xi. generating a database of Chromatographic Fingerprints and barcodes and identifying the respective compounds of the extract.

OBJECTS OF THE INVENTION

The main objective of the present invention is to propose a novel method for chemical and therapeutic standardization by detection and identification and chromatographic fingerprinting of organic, organo metallic and metallic constituents of extracts of plants, animal or geological origin, natural or synthetic sources capable of responding (absorb, emit, reflect, refract or diffract) to different wavelengths of electromagnetic radiations, possessing different chemical and therapeutic properties at different pH, temperature, viscosity and ionic media using their physico chemical properties like polarity, conjugation, mass and total quantum of energy of the analytes.

Another object of the present invention is to identify the molecules in the said compounds by the absorptive, refractive, reflective, diffractive and emission properties of various constituents in the medicine related to a specific efficacy due to its action on a specific single or multiple pathways.

One more object of the present invention is identifying, determining and classifying the constituents by the absorptive, refractive, reflective, diffractive or emission of an electromagnetic, electrical or magnetic energy of the eluted constituents based on physico chemical properties like polar, medium polar and, less or non-polar properties and conjugation for chemical and therapeutic standardization of the sample analyzed.

Yet another object of the present invention is to provide a complete chemical analysis of the constituents present in the medicine under study and their conjugative properties indicating the therapeutic efficacy as per the traditional concepts of the medicine using new software developed.

Yet another object of the present invention relates to a method, where in a single solvent Ethanol or aqueous Ethanol is used for extraction of the constituents; same analytical conditions and instrumental parameters were used for all samples to bring the therapeutic generalizations there by achieving the therapeutic standardization.

Still one more object of the present invention relates to a method, wherein, an inbuilt software provides a novel concept of chromatographic finger printing of herbal medicines that will be useful for the quick identification of the actual profile of the compounds present in the medicine under use along with their therapeutic efficacy of the constituents.

Yet another objective of the present invention relates to a method of Chromatographic Fingerprinting where in the atoms/ molecules are separated using a chromatographic method of separation and arranged in the specific order of polarity along with conjugative property measuring the absorptive and emission property of an electromagnetic radiation by the analytes.

Still another object of the present invention is to provide a software capable of analyzing (extracting colors) the colored contour and 3-D chromatographic image based on various colors with respect to a specific energy as presented in the energy box. The box denoting the concentrations and energies of various constituents eluted with time having arranged in a specific order of polarity indicated as retention time at a specific pH, temperature, viscosity and ionic media.

Yet another object of the present invention relates to a method, wherein, an inbuilt software provides a novel chromatographic finger printing of herbal medicines and formulations analyzed and are developed on a electromagnetic radiation detector like Photo Diode array Detector (PDA) connected to a chromatographic instrument like High Pressure Liquid Chromatograph, which delineates the data of the spectral properties of the constituents present in the material having the medicinal value, presented in a specific

order of physico chemical properties like polarity along with conjugation generated under similar experimental analytical conditions.

One more object of the present invention relates to a method used as a data processor of 3-D data graphs and color contour image of an ingredient.

Still another object of the present invention relates to a method which uses solvents for extraction, are selected based on the polarity, hydrophilic and hydrophobic nature of the constituents of the sample under study.

Still another object of the present invention relates to a method wherein, the polarity of the mobile phase of a non-aqueous and an aqueous solvent of a specific pH is controlled by varying the ratio of the mobile phase from 0% to 100% of an aqueous solvents like water or a buffer of a known pH, along with a non-aqueous solvent and vice-versa.

Still another object of the present invention relates to a method wherein, on analysis of 3-D and contour chromatograms using new software, gives a data having indicated the vitiation of doshas quantitatively in percentage ratio.

Still another object of the present invention relates to a method of Chromatographic Fingerprinting to assess the healthy or diseased patterns of a human being, animal or a microorganism, which helps for different purposes of disease identification, disease monitoring, drug selection, drug targeting and drug monitoring.

Still one more object of the present invention relates to a method of Chromatographic Fingerprinting where in the atoms/ molecules are separated and arranged in the specific order of polarity along with conjugative property measuring the absorbance, emission, reflection, refraction or diffraction properties of an electromagnetic radiation by the analytes.

One more object of the present invention relates to a method of Chromatographic Fingerprinting where in the 3-D box is the container of the three energies where in the constituents of different properties will be having the polarity.

Still another object of the present invention relates to a method of Chromatographic Fingerprinting where in the 3-D box is the container of the three types of molecules with specific energies where in, the constituents with known properties of the molecular

structure, mass, polarity and conjugation will be indicating the chemical and therapeutic properties of the constituents and the medicines.

Yet another object of the present invention relates to a method of Chromatographic Fingerprinting where in the molecules are eluted in a specific order of polarity with a range of conjugative property using detectors with measurement of absorbance, emission, reflection, refraction or diffraction properties of matter when exposed to electromagnetic radiation, along with conductivity, molecular structure and mass is useful for the chemical and therapeutic standardization.

One more object of the present invention relates to a method capable of Chromatographic Fingerprinting where in the molecules are arranged in a specific order of physico chemical properties for chemical and therapeutic standardization.

Still another object of the present invention relates to a method capable of Chromatographic Fingerprinting where in the molecules in a sample matrix are separated by means of a chromatographic technique and arrange in a specific order of polarity for chemical and therapeutic standardization based on the polarity along with conjugation properties.

Yet another object of the present invention relates to a method capable of analyzing a sample at different electromagnetic radiations, polarity, viscosity and temperature using suitable pumps to pump the liquids of mobile phase, having a detector which can measure the absorbance, emission, reflection, refraction or diffraction properties of analyte samples in a selected range of wavelength, having a software generating analysis data after coordination and compilation of signals from different types of detectors and analyzing the data for chemical and therapeutic standardization, generating barcode for the data generated after analysis and finally arranging the data in specific data base folders.

Another object of the present invention relates to a method capable of Chromatographic Fingerprinting where in the physico chemical properties of the carrier are varied for eluting the molecules of a sample matrix to be separated on a chromatographic separation media of a planar or closed chromatographic system for chemical and therapeutic standardization.

Still another object of the present invention relates to a method capable of Chromatographic Fingerprinting where in the analytes after separated on a

chromatographic system under different conditions of temperature, pH and viscosity and detected with detectors able to detect the mass, fragmentation pattern, conductivity, polarity, refraction, reflection, diffraction, absorptive and emissive properties of the analytes over a range of electromagnetic radiation for chemical and therapeutic standardization of natural, biological and synthetic materials and medicines.

Yet another object of the present invention relates to a detection system which arrays the results of interaction of radiation with matter for the molecules arranged in a specific order of polarity and results in interpretation of the chemical and therapeutic properties of analyte sample.

Still another object of the present invention relates to a method as, where in the chemical and therapeutic standardization is assessed for a material using the absorptive, refraction, reflection, diffraction and emissive properties of the molecules at a specific single or multiple wavelengths of radiation energy ranges to which the matter is exposed.

Still another object of the present invention relates to a method of chromatographic system having the data generated due to the separation of analytes over a separation media under specified analytical conditions leading to chemical and therapeutic standardization of the analytes under test.

Still another object of the present invention relates to a method of chromatographic system for chemical and therapeutic standardization based on the pattern of the energy data graphs generated due to the inter action of radiation with matter in a detection system to which the matter is exposed to.

One more object of the present invention relates to a method of bio informatics to assess the efficacy of a medicine and a diseases pattern/status of a living being for disease identification, disease monitoring, drug identification, drug targeting, drug selection, drug monitoring and drug inter action with biological systems

Still another object of the present invention relates to a method, where in the solvents of different polarities are used for extraction based on the hydrophilic and hydrophobic nature of the sample and the constituents under study, generally ethyl alcohol is used as solvent for preparation and standardization of medicines.

One more object of the present invention relates to a method, where in the Chromatographic Fingerprints can be developed for a same medicine extracted under different pH, polarity, viscosity, ionic media and temperature values.

Another object of the present invention relates to a method, the said method is carried out using standard analytical parameters like extraction with ethyl alcohol, maintaining a regular run time although the analysis of samples, eluting with a mobile phase of acetonitrile and phosphate buffer having a pH range of 3-9, electromagnetic radiation range of 200-800nm or below or beyond using a suitable and capable detector, maintaining column, total flow line and detector in the temperature range of 15-70° C, a mobile phase conductivity range of 0 to 50 X 10³ mhos.

Still another object of the present invention relates to a method, wherein the non-aqueous, organic and aqueous, water or buffer used under specified pH, viscosity, ionic media and temperature are selected based on the range of pH, viscosity, ionic media, temperature and polarity required.

One more object of the present invention relates to a method, wherein converting the analytical data into a colored image or an analyzable data comprising the conjugative and polarity properties and quantitative data of the constituents of the medicine under study.

Still another object of the present invention relates to a method, where in the therapeutic efficacy of a medicine (Single or formulated) is assessed using the quality of the constituents present in a particular polarity and electromagnetic radiation for refraction, reflection, diffraction, absorptive and emissive responses and the data graphs with X, Y, Z coordinate points indicating specific property in different of zones of the Chromatographic Fingerprint.

Still another object of the present invention relates to a method, where in the software generates a bar code for the properties of the images like a selected peak or peaks or whole image or movie using the X (Retention Time), Y (Wavelength), Z (Absorbance, In case of 3-D image and movie file like Avi, Mpeg etc), R (Number Of Red Pixels), G (Number Of Green Pixels And B (Number Of Blue Pixels) coordinates, provided by the software, which makes the product propriety for an industry.

Another object of the present invention relates to a method, where in the solvents used for extraction is selected based on the polarity, hydrophilic and hydrophobic nature of the constituents, sample and its constituents under study.

Still another object of the present invention relates to a method, wherein the polarity of the mobile phase of a non-aqueous and an aqueous solvent of a specific pH, is controlled by varying the ratio of the mobile phase from 0% to 100% and vice-versa of an non aqueous solvents like acetonitrile, methanol aqueous solvents like phosphate buffer.

One more object of the present invention relates to a computational method of chromatographic finger printing, chemical and therapeutic standardization and bar coding of Organic, Organo-metallic and metallic atoms or molecules from a plant, animal, a naturally available or man-made materials used as medicines.

Still another object of the present invention relates to a method wherein it provides absorption/ emission spectra of the compounds having displayed the conjugative and polarity properties of the molecules and the concentration of the individual concentrations of the molecules along with the polarity and quantum of energy of the molecules.

One more object of the present invention relates to a method where in the chemical and therapeutic standardization is achieved by interaction of matter to different individual electromagnetic radiations when the data is presented as chromatographic fingerprint.

Still another objective of the present invention relates to a method wherein, same standard analytical parameters like Extraction with same solvent Ethyl alcohol, same run time, same mobile phase acetonitrile along with phosphate buffer in a specific pH in the range of 3-9, same conductivity range of $0-50 \times 10^3$ mhos and a same range of Electro Magnetic radiation from 200nm – 800nm is used for Chromatographic Fingerprinting and chemical and therapeutic standardization along with subjecting the samples to different variable analytical factors like pH, temperature, column length, run time and Polarity of the stationary phase and mobile phase and maintaining the same order of arrangement of the molecules based on polarity, and molecular size in the specific order, is the basis of the assessment of chemical and therapeutic quality of the samples under study.

Yet another object of the present invention relates to a method of Chromatographic Fingerprinting where in the measurement of absorbance energy is indicating the activity of

a constituent in absorbing the respective quantum of energy at a specific X, Y, Z position of the energy system with specific polarity and conjugative properties from the diseased conditions making to cure the disease pattern and hence therapeutically indicative.

Another object of the present invention relates to a method of Chromatographic Fingerprinting where in the respective zones and X, Y, Z coordinates of the constituents have a specific property of chemical and therapeutic efficacy of the analyte constituents present in a medicine.

Still another object of the present invention relates to a method of Chromatographic Fingerprinting where in influence of variable factors like temperature, pressure, pH, ionic media and viscosity of the mobile phase, stationary phase and sample will be influenced to arrange the atoms and molecules in a specific order of polarity whose conjugation and molecular structure will be analyzed along with conductivity will be useful for the chemical and therapeutic standardization.

Yet another object of the present invention relates to a method of Chromatographic Fingerprinting where in the gradient, ternary or quaternary run of the mobile phase ends at the ratio where it starts.

Still another object of the present invention relates to a method of Chromatographic Fingerprinting using which the interpretation of the activity of the analyte atom or molecules and their energies having a specific quantum of energy along with structural properties relates to their chemical and bio chemical and biophysical activities.

One more object of the present invention relates to a method of Chromatographic Fingerprinting using which the interaction of molecules of different polarities is assessed when they are arranged in the order of polarity.

Another object of the present invention relates to a method as, where in the temperature, pH and polarity of the mobile phase is controlled by varying the temperature, the ratio of the mobile phase of a solvent between 0 to 100% of an aqueous solvent like Water or a phosphate buffer at a required pH by using suitable buffer to maintain the required pH, polarity and ending at the ratio where it started with a non-aqueous solvent by a gradient, ternary or quaternary run.

Still another object of the present invention relates to a method, wherein the non-aqueous, organic and aqueous, water or buffer at a known temperature, viscosity and pH are solvents used are selected based on the range of temperature, viscosity, ionic media, pH and polarity required.

Yet another object of the present invention relates to a method, wherein, same standard analytical parameters like Extraction, run time, mobile phase, range of Electro Magnetic radiation influenced by variable factors like pH, temperature, column length, run time, Polarity of the column, stationary phase and mobile phase, maintaining the same order of arrangement of the molecules based on polarity and molecular size in the specified order are used to achieve chemical and therapeutic standardization.

One more object of the present invention relates to a method, for chemical and therapeutic standardization based on the pattern of the energy data graphs generated due to the interaction of radiation with matter in a detection system to which the matter is exposed to, after an orderly separation.

Still another object of the present invention relates to a method, a bio informatics tool to assess the efficacy of a medicine and a diseases pattern/status of a living being for disease identification, drug identification, drug targeting, drug selection, drug monitoring and drug inter action with biological systems

Another object of the present invention relates to use of Chromatographic Fingerprints of contour and 3 -D chromatograms of the constituents as claimed in any of the proceeding claims are the basis for identification of chemical constituents for chemical and therapeutic standardization.

One more object of the present invention relates to a method of Chromatographic Fingerprinting where in the method enables to understand and standardize the variations in Physico-Chemical properties of the medicines in the form of energy variations, different states of three energies. These variations are present in medicine and living beings used for the therapeutic standardization using conjugative and polarity properties of the medicines shown in chromatographic fingerprints.

Still another object of the present invention relates to a method of Chromatographic Fingerprinting using which the variable factors like temperature, humidity, viscosity, ionic

nature etc., on the physico chemical properties and thus therapeutic efficacy of a medicine can be assessed using the 3-D energy box.

One more object of the present invention relates to a method, where in preparation of a database of a large number of samples will give many generalizations of the therapeutic efficacy of a particular group of plants or animals classified as a group for a particular disease for therapeutic identification, classification, standardization and monitoring.

Still another object of the present invention relates to a method of Chromatographic Fingerprinting where in the atoms/ molecules are separated using a chromatographic method of separation and arranged in the specific order of polarity using a separation technique where in the variable parameters like polarity, pH, temperature, ionic and electrical charge and viscosity of the reaction media, mobile phase, stationary phase and sample under analysis which will be varied leading to the interpretation of the Tridosha properties and efficacy of the same.

Yet another object of the present invention relates to a method of Chromatographic Fingerprinting where in the absorption and emission of the electromagnetic radiation by analyte constituents in a medicine along with polarity property will help to understand the efficacy of the same and the efficacy is due to these two basic properties.

Still yet another object of the present invention relates to a method of Chromatographic Fingerprinting where in the 3-D box is the container of the three energies where in the constituents of Agni in nature or in the first zone of the Chromatographic Fingerprint, Jala property in the second zone of the Chromatographic Fingerprinting and Prithvi in the last zone. The Vayu is present in the last zone and in the area where in there in no constituents were present in the entire container.

Yet another object of the present invention relates to a method of Chromatographic Fingerprinting where in the chemical profile in diseased and healthy blood samples can be studied in a microorganism, animal and human being to correlate the disease profile with chemical profile indicating the relation of polarity and conjugation for drug selection, drug identification, drug targeting and drug monitoring.

Still another object of the present invention relates to a method of Chromatographic Fingerprinting where in the energy at different doshas at deficient, sufficient and excessive

states of levels indicating the energy variations of natural microorganism, animal and human being along with medicines and synthetic materials.

One more object of the present invention relates to a method of Chromatographic Fingerprinting using which therapeutic grouping of constituents and medicines can be done based on the said atomic and molecular properties.

Yet another object of the present invention relates to a method of Chromatographic Fingerprinting useful for the assay of the taste and its order, color of transmission and absorption and odor will be done at different levels of energy variations to understand the process of biotransformation and biogenesis.

Still yet another object of the present invention relates to a method of Chromatographic Fingerprinting where in the traditional properties mentioned in the basic concepts mentioned in the traditional philosophies were correlated to the physico chemical properties of the medicines.

One more object of the present invention relates to a method of Chromatographic Fingerprinting where in the physico chemical properties like polarity, conjugation and quantum of energy of the atoms and molecules are useful to identify the bio chemical pathways having the same properties involving a specific energy.

One more object of the present invention relates to a method of Chromatographic Fingerprinting useful for understanding the evolution of the dosha and dhatu properties of the medicines in living and non-living things.

Yet another object of the present invention relates to a method of chromatographic fingerprinting of the native medicines of a particular place or country to develop suitable traditional philosophies and dictionaries for the chemical and therapeutic standardization.

Still another object of the present invention relates to a method of chromatographic fingerprinting of the blood samples of living beings of a particular place or country to develop suitable traditional medical philosophies and dictionaries for the chemical and therapeutic standardization.

Another object of the present invention relates to a method of Chromatographic Fingerprinting as, wherein the method enables to understand and standardize the variations in Physico-Chemical properties of the medicines in the form of energy variations of

different states of Tri dosha energies present in medicine and living beings, for chemical, clinical and therapeutic standardization.

One more object of the present invention relates to a method, where in the Chemical and therapeutic standardization properties are assessed for a material using the absorbance, emission, reflection, interference, refraction and diffraction of the molecules at a specific single or multiple wavelengths range to which the matter is exposed and the data is interpreted for single and multiples of wavelengths in a fingerprint.

Another object of the present invention relates to a method of Chromatographic Fingerprinting for creation, improving, altering and modifying the capability of hard wares and soft wares useful for drug discovery.

Still another object of the present invention relates to a method of Chromatographic Fingerprinting where in the arrangement of molecules in a specific order of physico chemical properties after separation on a separation media for chemical and therapeutic standardization with and with out recycling the eluent molecules either in to the same column or in to a battery of separation systems.

Another object of the present invention relates to a thermally protected and controlled system containing the separation media of stationary and mobile phases, detector flow cell system along with the flow line to develop chromatographic fingerprinting for chemical and therapeutic standardizations.

One more object of the present invention relates to a detector flow cell with thermally varying and controlling facility which change the temperatures as programmed and detect the bathochromic, hypso chromic, hyper chromic and hypo chromic variations of the spectrum at varying analytical conditions, of the samples passing through the flow cell for chromatographic fingerprinting for chemical and therapeutic standardizations.

Yet another object of the present invention relates to a One of the present objective of the present invention relates to a method for the standardization of matter and radiation for the assessment of the quantum energy they can deal and arrange the matter in an order based on their physico chemical properties and kinetics.

Still another object of the present invention relates to a method for the standardization of matter and radiation for the assessment of the quantum energy they can deal and arrange

the matter in an order based on their physico chemical properties and kinetics for quantum chemical studies.

Yet another object of the present invention relates to a method of Chromatographic Finger Printing, the data is obtained for identifying the chemical constituents present in it for the purpose of chemical, therapeutic and process standardization and quality control activities of African, Allopathic, Ayurvedic, Chinese, Homoeo, Kampo (Japanese), Siddha, Unani and Tibetan medicines or any medicines.

One more object of the present invention relates to a method for the standardization of matter and radiation for the assessment of the quantum energy they can deal and arrange the matter in an order based on their physico chemical properties and kinetics for quantum bio chemical studies.

Yet another object of the present invention relates to a method for the standardization of matter and radiation for the assessment of the quantum energy they can deal and arrange the matter in an order based on their physico chemical properties and kinetics for quantum bio physical studies.

Still yet another object of the present invention relates to a method for the standardization of matter and radiation for the assessment of the quantum energy they contain and arrange the matter in an order based on their physico chemical properties and kinetics for quantum chemical studies by using an equation $E = m^{\pm p} C^{\lambda}$ Where in m is the mass, p is polarity at specific temperature and pressure of the analyte material and C is the speed of the respective radiation.

Yet another object of the present invention relates to a method for the standardization of matter for the assessment of the chemical, therapeutic and biological properties by the generalization of their commonalities and differences in the profile.

One more object of the present invention relates to a method of analysis using the patterns of electromagnetic radiations absorbed or emitted, generated for a sample for chemical and therapeutic standardization.

Another object of the present invention relates to a method of analysis using the graphical data patterns of electromagnetic radiations absorbed, emitted, reflected, refracted, interference, diffracted with the analyte and generate data for a sample by a separation

method using different properties of the carrier media to separate over a separation media, separating and arranging the constituents in a specific order of polarity along with measured responses of the constituents with interaction of electromagnetic radiations for chemical and therapeutic standardization of material under test.

Yet another object of the present invention relates to a method of analysis for the standardization of organic reagents for chemical and activity standardization.

One more object of the present invention relates to a chromatographic fingerprinting method of analysis for the chemical and therapeutic standardization of Nanoparticles in materials.

Still another object of the present invention relates to a Chromatographic fingerprinting method for the chemical and therapeutic standardization of nutritional values of foods, nutritional dietetics and nutritional genomics.

Still yet another object of the present invention relates to a method of chromatographic fingerprinting for the chemical and therapeutic properties of proteins and genetic material for proteomics and genomics studies.

Yet another object of the present invention relates to a method of chromatographic fingerprinting which provides the properties of the analyte with out a referral standard.

Still another object of the present invention relates to a software capable of interpreting constituents between 0-20 minutes as Pitta in nature which are in Zone 1, of the image where in 0 minutes is acute and 20 is chronic.

One more object of the present invention relates to a software capable of interpreting Constituents in the range of retention times 20-40, as Kapha in nature which are in Zone 2, of the image where in where in the constituents at 20min acts on acute and 40min acts on chronic conditions.

Yet another object of the present invention relates to a software capable of generating a chromatogram based on the color analyzed (Extracted from finger print using a Graphic User Interface software developed), having peaks at various retention times along with different physico chemical properties like conjugative and polarity properties of the analyte constituents eluted with time.

Another object of the present invention relates to a software capable of interpreting Constituents in the range of retention times 40-60, as Vata in nature which are in Zone 3, of the image where in where in constituents at 40 acts on acute and 60 is chronic conditions.

Yet another object of the present invention relates to a software capable of interpreting Constituents in the range of retention times 5-15, as Kashaya, Astringent, in nature which are in Zone 1, of the image.

One more object of the present invention relates to a software capable of interpreting Constituents in the range of retention times 15-20 min, as Katu, Pungent, in nature which are in Zone 1, of the image.

Yet another object of the present invention relates to a software capable of interpreting Constituents in the range of retention times 25-35, as Tikta, Bitter, in nature which are in Zone 2, of the image.

Another object of the present invention relates to a software capable of interpreting Constituents in the range of retention times 25-35, as Lavana, Salty, in nature which are in Zone 2, of the image.

Yet another object of the present invention relates to a software capable of interpreting Constituents in the range of retention times 30-40, as Amla, Sour, in nature which are in Zone 2, of the image.

Still another object of the present invention relates to a software capable of interpreting Constituents in the range of retention times 35-55, as Madhura, in nature, which are in Zone 2 and 3, of the image.

Still yet another object of the present invention relates to a software capable of interpreting Constituents absorbing from 200-800 nm, as Dosha kara/Vridhi, in nature which are in Zone 1,2 and 3, of the image when a sample is analyzed on a separation media and molecules arranged in an order of polarity.

One more object of the present invention relates to a software capable of interpreting Constituents absorbing from 200-400 nm, as Increase of respective conjugative property said to be Dosha hara, in nature which are in Zone 1,2 and 3, of the image when a sample is analyzed on a separation media and molecules arranged in an order of polarity.

Still another object of the present invention relates to a software capable of interpreting Constituents absorbing from 200-800 nm, as Increase of respective property will be Sheeta Veerya, in nature which are in Zone 2, of the image when a sample is analyzed using a separation media.

Still yet another object of the present invention relates to a software capable of interpreting Constituents absorbing from 200-800 nm, as Increase of respective property will be Ushna Veerya, in nature which are in Zone 1, of the image when a sample is analyzed using a separation media.

Another object of the present invention relates to a software capable of interpreting the Vipaka (Post assimilative) property, which is absent before and present after interacting with an enzyme in a medicine/biological fluid.

Another object of the present invention relates to a software capable of interpreting the Sookshma property (Smaller molecules or absorbing sharply at lesser wave lengths, 190-220 nm), which are in Zone 1,2 and 3, of the image when a sample is analyzed using a separation media.

Still yet another object of the present invention relates to a software capable of interpreting the Rooksha (Volatile high to medium polar molecules) property based on the absorption spectra and polarity of the ingredients in Zone 1,2 and 3, of the image when a sample is analyzed using a separation media.

One more object of the present invention relates to a software capable of interpreting the Snidha (Viscous medium to non polar molecules) property based on the absorption spectra of 200-800 nm and polarity of the ingredients in Zone 1,2 and 3, of the image when a sample is analyzed using a separation media.

Still another object of the present invention relates to a software capable of interpreting the Laghu property based on the absorption spectra, polarity and less number of ingredients in Zone 1,2 and 3, of the image when a sample is analyzed using a separation media.

Yet another object of the present invention relates to a software capable of interpreting the Guru property based on the absorption spectra, polarity and large number of ingredients in Zone 1,2 and 3, of the image when a sample is analyzed using a separation media.

Still another object of the present invention relates to a software capable of interpreting the Sandra (Viscous molecules) property based on the absorption spectra of 200-800 nm and polarity of the ingredients in Zone 2, of the image when a sample is analyzed using a separation media.

One more object of the present invention relates to a software capable of interpreting the Sthoola (heavy molecules) property based on the absorption spectra and polarity of the ingredients in Zone 3, of the image when a sample is analyzed using a separation media.

Still another object of the present invention relates to a software capable of interpreting the chemical and therapeutic property of the analyte based on the 3-D and contour chromatographic fingerprints developed due to the interaction of radiation with matter and the data graph divided in to different zones and marked with respective therapeutic property based on specific X, Y and Z coordinates of the data graph or movie, wherein the retention time value is not a limitation

Another object of the present invention relates to a method of Chromatographic Fingerprinting useful for chemical and therapeutic standardization of petroleum products.

Still another object of the present invention relates to a method of Chromatographic Fingerprinting useful for the standardization of agricultural products.

One more object of the present invention relates to a method of Chromatographic Fingerprinting useful as a diagnostic tool for the analysis of healthy and diseased samples for chemical and therapeutic standardization

Still another object of the present invention relates to a method of Chromatographic Fingerprinting useful for the toxicity studies for chemical and therapeutic standardization.

Another object of the present invention relates to a method of Chromatographic Fingerprinting useful in chemical and therapeutic standardization of forensic sciences.

One more object of the present invention relates to a method of Chromatographic Fingerprinting useful for the chemical and therapeutic standardization of industrial products.

Still another object of the present invention relates to a method of Chromatographic Fingerprinting for the chemical and therapeutic standardization of environmental samples.

Another object of the present invention relates to a method of Chromatographic Fingerprints of data graphs of the analyte will be the basis for identification and standardization of chemical constituents to limit the scope of the invention.

Still another object of the present invention relates to a method of Chromatographic Fingerprint data is used for the study of variation of chemical constituents in biological samples and to identify and standardize the chemical constituents in them to know the pathological, healthy and diseased status of the source living being thus leading to chemical and therapeutic standardization.

Yet another object of the present invention relates to a method of, Chromatographic Fingerprinting used for the adulterated, substituted, contradictual, commercial food and drug samples and to identify the chemical and therapeutic properties of pure and impure.

Another object of the present invention relates to a method of wherein, the data obtained is used for the study of variation of chemical and therapeutic properties of the constituents due to various ecological factors, geological factors, genotype and phenotypic variations (in plant and animals) in naturally occurring samples and to identify and standardize the chemical constituents in them.

Still another object of the present invention relates to a method of wherein, the data obtained is used for the study of chemical constituents in synthetically prepared samples and to identify and standardize the chemical constituents in them for chemical and therapeutic standardization which ever is applicable.

Yet another object of the present invention relates to a method of Chromatographic fingerprinting wherein, the data obtained is used for the study of chemical constituents in herbal products of single medicine samples and to identify the chemical constituents in them for chemical and therapeutic standardization.

Still another object of the present invention relates to a method of Chromatographic fingerprinting wherein, the data chromatograph is used for the study of chemical constituents in herbal products of formulated medicine samples and to identify the chemical constituents in them for chemical and therapeutic standardization.

Another object of the present invention relates to a method of Chromatographic fingerprinting wherein, the data obtained is used for the study of variation of chemical

constituents in different brands of products of single and formulated food and medicine samples and to identify the chemical constituents in them for chemical and therapeutic standardization.

Still another object of the present invention relates to a method of Chromatographic fingerprinting wherein, the data of medicines facilitates to categorize and quantify the constituents of a medicine based on polarity and conjugation from 3-D and contour chromatograms and assess the therapeutic efficacy of the medicine on which humors it is going to act (vitiate, balance).

One more object of the present invention relates to a method of Chromatographic fingerprinting wherein, the data obtained enables to understand and standardize the Physico-Chemical properties of the medicines like color for the use of therapeutic standardization of medicines and humors (Tri Doshas) using conjugative and polarity properties given in the chromatographic fingerprints.

Still another object of the present invention relates to a method of chromatographic fingerprinting which enables to understand and standardize the microcosm and macrocosm of the medicines used for therapeutic standardization using conjugative (indicated on Y-axis) and polarity (indicated on X axis) properties given in the chromatographic fingerprints.

Another object of the present invention relates to a method of Chromatographic fingerprinting wherein, the method enables to understand and standardize the Physico-Chemical properties of the medicines like Tastes (Rasa) like Sweet, Sour, Salty, Pungent, Bitter and Astringent (Madhura, Amla, Lavana, Tikta, Katu and Kashaya as described in Ayurveda) used for therapeutic standardization using conjugative and polarity properties given in the chromatographic fingerprints.

Still another object of the present invention relates to a method of Chromatographic fingerprinting, wherein the data obtained enables to understand and standardize the Physico-Chemical properties of the medicines like Property, Potency, Metabolite, Specific properties like Chirality of the molecules (Guna, Veerya, Vipaka, Prabhava) used for the therapeutic standardization using conjugative and polarity properties of the individual constituents and the whole medicine shown in the chromatographic fingerprints.

Another object of the present invention relates to a method of Chromatographic fingerprinting wherein, the data enable to understand and standardize the Physico-Chemical properties (Gunas) of the medicines like Cold, Hot, Slow in action, Sharp in action, Heavy, Light, Soft Lubricated Supple, Dry (Sheeta, Ushna, Manda, Teekshna, Guru, Laghu, Snigdha, Rooksha as described in Ayurveda) used for the therapeutic standardization using conjugative and polarity properties of the medicines shown in chromatographic fingerprints.

BRIEF DESCRIPTION OF THE ACCOMPANYING TABLES AND FIGURES AND MOVIE

TABLES

1. The table of standardization shows different methods of chemical and therapeutic standardizations used in modern and traditional medicines.
2. The table of Shadrassa Nighantu show different medicines classified based on their taste. Traditional practioners use this for selecting a specific medicine for a specific therapeutic purpose.
3. The equivalent English terms for were given for the traditional names of the diseases used in Indian traditional philosophy.
4. The table of kashaya scanda (Chapter of Astringents) shows different single herbs used a specific therapeutic efficacy. Physico chemical properties of the medicines related to taste property are used to understand the chemical and therapeutic properties of the medicines.
5. The Sage 'Charaka' has classified the medicines based on their efficacy. Any medicine from these groups will be used for the required efficacy.
6. Traditionally medicines were classified in to different numbers based on the Physico chemical properties. The table of Ganoushadhas (Groups of medicines) shows the same.
7. Different proportions of Tri Doshas exist in living being due to different factors like genetic, ecological, geological, temperature, viscosity, pH and ionic nature. These properties will be continuously fluctuating in a day, season and year. This explains how each person varies from other, which was explained in the Prakrithi concept of Indian Systems of medicines. The medicine prescribed will depend based on the status of these properties, Dosha Bhedas, in the person existing as on that moment. Hence

traditional practioners will suggest different medicines for the same disease in different persons.

- 8-9. The Physico chemical properties were correlated for using as guidelines for identification of the properties of the medicines.
- 10-12. The evolution of Panchabhutas (5 Elements) with different stages of living and non-living things is given. Every system has to under go this change if it under goes. The relation of color has also been established.
- 13-15 Traditionally medicines were related to astrological parameters. In traditional philosophies the astrological factors are taken in to consideration while selecting a medicine and treating a patient.
16. The Sanskrit slokas indicate how the morphological properties were explained indicating the life existing in plants.
17. The table presents the relation of tridoshas with diseases
18. The traditional parameters used in Ayurveda were given showing the inter and intra relation among them.
- 19-21. Traditionally medicines were classified based on efficacy. They indicate the biochemical pathways in the modern medicine. Deepaneeya (Appetizer), Lekhaneeya (Atherosclerotic) and Vrana shodhana and roopana (Wound healing) medicines were shown in the presentations.
22. The fingerprint is divided in to different groups based on the x, y and z coordinate.

FIGURES

1. Four windows of a commercially available HPLC instrument are shown. Usually chromatogram at a selected wavelength is under use. The contour chromatogram is usually used for selection of a suitable wavelength for chromatogram at a specific wavelength.
2. The present method of chromatographic analysis use chromatograms of a medicine at any selected wavelength needs to be analysed and presented at all 800 wavelengths for complete analysis of all of the constituents present in a sample, absorbing at different wavelengths of UV- Visible range of radiation. The examples of such chromatograms at 8 selected wavelengths were shown for a turmeric sample. This was given in our earlier patent PCT/IN/00123.
3. The traditional philosophies consider human health as a management of a balance

between three doshas. The imbalance leads to disease. The physico chemical properties of the medicines are correlated to the efficacy in terms of Tri Doshas and Panchabhutas.

- 4-5. Molecular modeling is a modern tool for drug discovery. Different mathematical calculations of the properties of molecules were used to predict the efficacy of the medicines. The guidelines available in traditional medicines help for a traditional practitioner to assess the efficacy of the medicine. If these properties are rationally assessed the efficacy of the medicine will be understood. Fingerprints of some of the medicines were presented along with the calculated values of the medicines using molecular modeling software. Even though the polarities of some of the molecules are same, their efficacy is not known. When the molecules were arranged in a specific order of physico chemical properties the efficacy was understood. Thus the present method is found to be more nearer to the fact than the mathematical tools.
6. The 3-D (Data graph) box is divided in to 27 parts on X,Y and Z axis. The molecules are arranged in the order of polarity on X axis, the spectral properties presented on Y axis and on the Z axis the variations in the electromagnetic properties due to interaction with analyte under different influencing physico chemical properties like temperature, viscosity, ionic nature and thermodynamic properties of the separation media, mobile phase, ionic nature and analyte moieties. The quantum of energy is measured for a required efficacy.
7. The 3-D Energy Box: When the Chemical Constituents were Arranged in the Order of Polarity along with their absorptive/emissive property the quantum of energy in different electromagnetic radiations were found to be useful for the chemical and therapeutic properties of the medicines. The VIBGYOR color on X and Y-axis indicates the Polarity and conjugative properties of the molecules, which are classified again in to three categories. The color 3-D box shows the same.

The polarity on the x-axis and the ultraviolet and visible spectrum representing the conjugative properties are measured along with their quantitative properties on the z-axis. Thus in the 3-D box, a specific x, y and z coordinate indicates a specific quantum of energy able to be dealt by the molecule. Hence the energy of the molecule will be E will be equivalent to the mass of the analyte sample having a specific charge (Polarity) and being able to deal a specific amount of energy equivalent to the radiation absorbed or emitted by the analyte matter. Thus the total energy dealt by the whole sample will be $E=MC^2$, where in the energy is the total energy of all the analytes present in the sample and the total white light (having all ranges of radiations).

But a molecule absorbing at only specific wavelength cannot have the energy of a different molecule absorbing at a different wavelength. Hence the specific quantum of energy possessed by the sample will depend on the specific wavelength dealt by the molecule. Because, no matter will be active when it is neutral, particularly a medicine

with many molecules. When the frequency and wavelength is different for different radiations the radiation what we see at a particular time have not started at the same time from the source. Hence time plays a very important role in every aspect including the activity of a medicine for a person. Thus separation, measurement of the absorbed/transmitted electromagnetic radiation by their individual constituents present at various conditions of temperature, pH and ionic media has helped to assess the chemical, biological and therapeutic properties of the material under test using the above method.

Movie 1

1. The figure of 3-D energy box show a data graph generated for the same medicine analyzed under different analytical conditions like time, temperature, viscosity, and pH. It shows the change of polarity and thus the retention time, the spectrum influenced by bath chromic, hypsochromic, and hypo chromic and hyper chromic effects due to the same factors. Thus it will help to assess the efficacy of the medicine or a biological sample about its changes in the physico chemical properties due to the above factors. Thus an accurate standardization of the analyte samples will be possible.
2. The box is the container where in the matter is shown to be changing its properties. The deficient energy present in different molecules of all polarity groups is presented to be changing to sufficient and excessive levels of energy due to different influencing factors. Any extremes of this energy gained or lost will lead to an imbalance in the properties of the material. Thus fulfilling the deficiency and removing the excessive energy will be the methods of treatments to bring normalcy in the energy levels leading to a healthy condition. Thus maintaining harmony in all the three types of energies will bring a healthy condition. Some of the Treatment used in Indian System of medicines like yoga, meditation, and pranayama involves the same. They help in bringing harmony in the variations in the energy levels, which were disturbed. Bringing back to normalcy will bring health.
3. When the external source of energy enters in to the body in the form of light having different wavelengths of energy, it will influence the internal energy system in the form of quantum energy. Thus by not allowing the external energy in the form of light is maintained by CLOSING the eyes, the fluctuations of energy inside the body will be prevented. Thus creation of any imbalance in TRIDOSHAS is prevented leading to healthy condition. Thus the energy box is the closed human body in which different variations of energy will happen.
4. The energy box is presented in the form of software, which presents the qualitative and quantitative chemical and therapeutic qualities of a medicine or diseased and healthy conditions in a biological system. Some of the Chromatographic Fingerprints of the samples of biological nature are presented.

5. Level 1 show the deficient energy level of the molecule or a biological system. Thus the biochemical pathways that could not happen due to deficiency of sufficient energy for the said mechanism will not be triggered.
6. Level 2 show that the sufficient levels of energy of the sample under test due to which a status of healthy condition will prevail leading to a healthy system.
7. Level 3 show the excessive levels of energy of molecules present in a medicine or a biological system. The removal of the excessive energy of the system will bring the normalcy in the energy system and thus the health is achieved.
8. For example if the system is exposed to varying states of energy then it becomes unstable. Irregular breathing, irregular eating habits, irregular day to day activities, temperatures fluctuating from very low to very high etc. Many of the epidemics erupt during the intermediate stages of seasons of cold and hot climatic temperatures, humid and non-humid conditions etc, Even the fluctuating the moods of the mind also will influence the health. Hence maintaining equilibrium in every state of life is essential. The flexibility property of the human being will give tolerance against these variations hence person who possess this property will be usually healthy and happy.

Hence maintaining healthy levels of energy will lead to healthy condition for which different molecules with energy absorbing, conditioning and donating properties will be useful. The behavior of a molecule under different conditions like temperature, pH, viscosity, ionic nature of the media in which the molecule is present can be understood.

The responsive (absorption/emission) property of molecules under experimental conditions at three different levels will indicate the qualitative and quantitative changes due to the influence of different conditions like pH, temperature, viscosity and ionic nature of the media where the reaction or activity is under going. It is this reason any medicine will not behave 100% similar in different human beings. In a set of animals, which are maintained under experimental conditions, may have some commonality in the response. But practically in an un controlled conditions the same response cannot be observed. Hence the medicine tested in controlled conditions may differ in the day-to-day life of the humans in uncontrolled conditions. The study of the response of the chemical and bio chemical reactions could be tested under practical conditions.

In the animated figure the same is shown. The radiations when moved with respect to time the quantum of energy will not be the same. Similarly a molecule having a particular quantum of energy will vary in its energy when it is exposed to different temperatures, pH and Ionic media and give different results from person to person and place to place, so on. Even though the medicine is consumed at single time

various constituents in it will be moving in different speeds due to their interaction with the surface on it is moving, like a set of molecules get separated over a chromatographic surface. It is the final quantum of energy being able to be measured which actually brings a change in the chemical atmosphere. Thus measurement of the energy dealt by a molecule along with its electrical charge will help to understand the chemical and therapeutic property of the sample under test.

9. The fingerprints of medicines with a specific color were given. The relation of color with efficacy was mentioned in traditional medicines. The color of absorbance is due to the chemical constituents present in it. The transmitted color of the sample was used as an indicator for the efficacy of the medicine. Thus indirectly the color of absorbance is used for the said efficacy.

10-15. The fingerprints of different medicines with a specific taste were given in different figures. The order of taste is found to be the order of chemical constituents in a specific order of polarity. Hence taste classification of medicines is the classifications based on polarity of the chemical constituents. The medicines will possess the required efficacy if they contain constituents having required polarity along electromagnetic radiation properties qualitatively and quantitatively.

16. The three Highly Bitter medicines were fingerprinted. Substitution of single medicines is common in commercial market assessment of right variety will help to select and used to achieve better clinical uses. In a state of unconformity fingerprints will help to identify the better variety. Usually *Swertia Chirata* is substituted with *Andrographis Paniculata*. It can be seen that the high polar constituents present in *Swertia* is not seen in *Andrographis*. Hence it cannot be used for Pitta hara properties. Thus the efficacy should be checked while substituting any medicine. The rich profile in the retention times of 25-30 minutes with Bitter taste can be seen in all the samples.

17-18. The medicines like *Chitraka* and *Danti* are mentioned to have a special property called "The Prabhava". Even though the medicines contain all tastes the first is majorly Pitta Kaphahara and the second is Kapha Vatahara. So first will close the channels and the second open the channel. There are different types of Prabhava. The medicines like *Rudraksha* and *Sahadevi* were also told to be examples of Prabhava. When the *Rudraksha* was soaked for longer time more quantity of samples were found to be get extracted. *Sahadevi* is mentioned for the treatment of Cancer.

19. Lekhaneeya medicines: When medicines used for a specific efficacy are analyzed and the fingerprints were studied the common molecules can be seen indicating efficacy.

20. Charaka Dashaimani Jeevaneeya medicines: The fingerprints of medicines classified as Jeevaneeya (Vitalizes) were shown. The commonality of the constituents

at 35-40 minutes in all samples proves that the therapeutic classification of Charaka was based on the chemical properties. Molecules of specific polarity have been mentioned for a specific efficacy.

21. Two generally used Medhya dravyas: fingerprints of Bacopa and Centella were presented. The Profile of Bacopa is more in Pitta and the profile in Centella is rich in constituents. Different substitutions need to be standardized.

22. When some of the Medhya Rasayana dravyas were observed a common chemical profile is seen as show marked. Thus different targeted efficacies were indicated in classifying the medicines based on efficacy rather than plat pharmacognostic properties.

23. Rasayana dravyas of Swasa (Bronchial) diseases

24. Rasayana dravyas of Sthoulya (Obesity)

25. Rasayana dravyas: Medicines like Gingkobiloba and Ashwagandha were considered as highly potent herbal Rasayana medicines. The similarity of two different plants for same efficacy will help for better substitutions.

26. Rasayana dravyas in general found to have an array of constituents in the entire range of polarity. Hence commonly they will be wide acting medicines. But medicines having molecules from 30-55 are found to be the immunomodulators. Constituents from 0-30 are anti oxidants.

27. Finger prints of Different sources of Boerrhavia species: Variation of chemical constituents among different genotypic & phenotypic plants should be standardized before using them.

28. Finger prints of Different sources of Vidarigandha species: Different sources of Vidarigandha (*Ipomoea digitata*) shows variation of chemical assay of the constituents the common molecules present in all varieties show that all these have some commonalities and variations.

29. Finger prints of Different sources of Amra Gandhi Haridra species: Collection and Processing of medicines needs to be standardizes. Herbal medicines collected from different soils, peeled and unpeeled show variations of chemical assay.

30. Different sources of Akarakarabha were presented. This helps to identify different types of the single medicine available in the world.

31-32. Some of the medicines are used for achieving a child of required sex. The medicines presented are used in Indian Systems of medicine for having a male child. This process is called as Pumsavana in Ayurveda.

33. The Jeemutha Lunar effect: The influence of lunar effect on the chemical constituents of plants was reported in traditional texts, one of such plants has been studied. The plant is showing different molecules of different efficacy when collected during specific timing. This emphasizes the need of standardization while collecting herbal medicines. If molecule similar to progesterone can be seen in the sample collected on the full moon day of a specific month.

34. Fingerprints of Sea buck thorn: Some of the herbal material used in day-to-day life will have many therapeutic properties. Standardization of such material; from different sources will help to select correct variety for clinical or nutritional purposes.

35. Fingerprints of different sources of Aegle marmalous fruit are presented. Usually the immature fruit is prescribed for clinical purposes. The ripe fruit show toxic profiles. Thus the collection specifications need to be standardized.

36. Fingerprints of *Drynaria quercifolia* show a rich profile. It is used for Osteo Arthrites. In Tamil 'Mudu' means joint Vattukkal means Vata hara. Arthritis is due to Vata, which will be cured by this medicine.

37. Single medicines used for hepatitis: Some of the medicines used for hepatic disorders were shown; medicines having constituents at the required polarity are proved to be potent.

38-39. Fingerprints of some Indian leafy vegetables are shown. The leafy vegetables have become rich sources of anti oxidants and immunomodulators. If they are a part of the life as food material the health is maintained well.

40. Genetically modified orange juice: When the foods and the medicines are modified by different methods they should not lose or change the properties as mentioned in traditional texts. If it happens the traditional philosophies of medicines will go erratic, as they have been designed based on the properties of material having specific physicochemical properties. The fingerprints of a genetically modified food product, the orange juices were presented in the figure. After genetic modification, if the products do not contain the same properties like the original with similar efficacy, the efficacy cannot be tested by traditional methods and so will act differently. If all herbal medicines are genetically modified the traditional philosophies will go erratic leaving the countries in dilemma about the traditional medicines and foods being used in day-to-day life.

41. Fingerprints of some anti stress medicines were presented which show common chemical constituents which possess common therapeutic properties.

42. Fingerprints of unknown material: When some materials like Sodium cyanide was analyzed, the Physico-chemical properties of the material were studied using the fingerprints as shown in the figure. Each country can develop the native plants as their traditional medicine using the basic concepts of traditional medicine. As any herbal medicine is selected based on the traditional literature, when it is reported as a medicine to have the required physicochemical properties required for a specific efficacy, assessment of their Physico-chemical would help to understand the efficacy of the medicine. Thus the method helps to confirm the presence of properties of a medicine whether it has all required properties to be a medicine, as mentioned in traditional texts.

Taste is one of the basic parameter used in traditional drug standardization. The order of taste is mentioned towards a specific efficacy of the material having the respective taste. If one can assess the taste of any material, which facilitates, understanding the efficacy of it, the drug discovery becomes easy. Taste being a subjective parameter, one needs a tool, which can give the taste of an unknown, unbiased. Taste even changes with person and his health. Tastes were related to polarity based on our method. The selection of a material of specific taste helps to select a material of specific polarity to deal with a specific disease, which is also related to polarity. The Astringency (Kashaya) and Pungent (Katu) are found to be to high polar, where the second is less polar to first one. Bitter (Tikta), Salty (Lavana), Sour (Amla) and Madhura (Sweet) are stretched from medium polar to non-polar as shown in figures 10-15. The Madhura, in traditional terminology was mentioned as the post assimilated (Vipaka) condition of Sweet. Then it is Vata hara. So understanding the Vipaka of any molecule/medicine will help to understand the final efficacy of it. The molecules at 2-4 minutes indicate Pitta vridhi, (very high polar molecules leading to hyper acidity) this makes the rest of the molecules to get fast absorbed by the body. The molecules around 30 minutes are indicating Bitter, Sour and Salty by taste. Being a salt it should be salty by taste. The High polar molecules seen in salts but not in all bitters confirm this. Or the salt or bitter may be dominating each other. It was observed that the polarity difference of these bitter, salty and sour tastes is very narrow.

Being an unpalatable toxic chemical it will be difficult to confirm by humans. It is not showing any sweet property as shown in the sweet example. The chemical is also showing Vata vridhi (hyper conjugated) indicating that it cannot be madhura by nature. The post-assimilated (Vipaka) status of this material was not studied due to many experimental limitations, but can be studied. Many of the medicines, which are bitter, show similar molecules at the same retention time. The salts at very high concentrations show sour taste. Thus the taste is related to the amount of energy, the molecules possess and the taste receptor it can trigger having a specific polarity. So it is the quantum of energy it can deal with that plays role in the efficacy of the medicine,

irrespective of its structure, many times. So salts should be acting due to their crystalline structures of the atoms arranged in specific order and geometry, which makes them therapeutically active. The polarity of the crystals could be controlled due to the geometrical arrangements of the ionic molecules in the crystal. These crystalline molecules should be triggering the respective taste receptors, resulting to specific tastes. That is why a PDA detector was able to give spectra of salts also. This indicates the utility of the present invention for assessing the property of an unknown plant or material. Thus it helps for assessment of the chemical and therapeutic unreported medicines.

43-44. Some of the medicines used for female fertility were presented. Constituents at 25-30 minutes are found to be present. Hence molecules having the specific polarity and conjugation were found to possess similar efficacy whether traditional or modern.

45. Traditional Medicines used in Indian cultural and traditional activity: Compounds of Betel leaf added with many ingredients are a tradition in Indian society. This was mentioned as medicine for some diseases. Using foods as traditional medicine in day-to-day life is a part of Indian society.

46-47. Traditional Medicines used in Indian cultural and traditional activity: Some of the herbal medicines are used in the day-to-day life of Indian society having many therapeutic properties. They protect the health of the people making them healthy.

48-49. Process standardization of Bhallathaka: Process standardization of medicines is required to protect the efficacy of a medicine. The change of chemical constituents and their efficacy should be assessed to monitor batch to batch and brand to brand variation.

50. Crude and processed single medicines with different anupanas were presented indicating the needs of process standardization of medicine preparation in every step of preparation.

51-54. Process standardization of Daru haridra rasa kriya: Process standard of Rasakriya of Daru haridra (*Berberis aristata*) is presented in this figure. One can show how the chemical assay of the medicine has been changed as per the need Dose dependent. Toxicity is reported in such preparations where one has to standardize the processed product for assessing efficacy and toxicity of the medicine. The final product at 8th step possesses Madhya property, which was indicated in the Indian traditional texts.

55. Cow products are widely used in India and worldwide. They too need to be standardized before us. Different Ghee samples were fingerprinted which show different chemical constituents.

56. Ghee sample lose their products on long storage. The Cow ghee sample shows different profiles when analysed at different shelf life.

57. Ghee and honey in different ratios was used in different conditions. Usually equal ratios of both are prohibited. The fingerprints show the same.

58-59. Cow milk is considered to be highly nutritious. Cow milk in different conditions was analyzed to monitor the shelf life of the product.

60-61. Cow curd is said to be influencing the elimination process. Which can be seen due to a constituent at 42 minute as marked. Similar profile is seen in the patients suffering with cardiac diseases.

62-63. Turmeric with milk is a regularly used material along with Piper nigrum. The samples show a rich profile when combined.

64. Fingerprints of herbal formulations used for hepatitis were presented.

65. Fingerprints of herbal formulations used for Diabetes were presented.

66. Fingerprints of herbal formulations used for Psoriasis were presented.

67. Fingerprints of herbal formulations used for Vitiligo were presented

68. Fingerprints of herbal formulations used for Bronchial disorders were presented

69-74. Fingerprints of classical Ayurvedic formulations presented. Classical Ayurvedic formulations: Different formulations used for different diseases were presented which are prepared based on the concepts of traditional philosophies. Some of them are herbo- mineral medicines being added with adding inorganic materials.

75. Fingerprints of herbal Medicines with gold used for Diabetes were presented

76. Siddhamakaradwhaja: Traditionally herbal medicines are processed by different methods using different materials namely anupanas. The effect of such processing should be monitored for their quality to confirm the achievement of required efficacy in the processed medicines.

77. Shadguna Rasa Sindhoora with an herbal medicine, Pushkaramula, Vibheethaki and honey were presented.

78. Fingerprints of Kajjali in different conditions were presented.

79. Fingerprints of Rasa Parpati in different conditions were presented.

80. Some inorganic medicines used for different efficacies were presented.
81. Hamsa Pottali: Some of the inorganic medicines were analyzed and presented. Inorganic products are considered as more potent in Indian traditional medicines. Figures of ESCA show how the medicines are changing their properties due to processing.
- 82-85. Siddha medicines: Some of the Siddha System of medicines were presented. The basic principles of selecting, preparing, standardization and utility of all philosophies will be common. Thus the basis of the traditional philosophies is the basic principles based on which the entire philosophy will be dealt.
86. Fingerprints of Nanoparticle of Iron are presented. In some of the traditional medicines, similar molecular pattern is seen.
87. Fingerprint of some Unani medicines
- 88-91. Fingerprints of Homoeo medicines: Mother tinctures and dilutions of some homeopathic medicines were presented. The efficacy can be assessed based on the fingerprint.
- 92-95. Allopathic medicines: Allopathic medicines used for diabetes were presented.
96. Allopathic medicines used for Postmenopausal syndromes were presented. The common chemistry can be observed.
- 97-103. Many allopathic medicines used for different purposes were presented.
- 104-106. Toxic compounds: Some of the cytotoxic compounds show the use of spectrum for the assessment of toxicity of the analyte samples. A wavy nature of the absorption spectrum is indicating toxic nature. Similar pattern is seen in herbal medicines also.
107. Fingerprints of Pesticide samples: Some of the pesticide samples show the utility of the method for the monitoring the changed properties after a biological degradation of a pollutant.
108. Fingerprints of Klebsiella Aero. and Staphylo Coccus (Micro organisms) were presented. When the human blood samples were analysed these profiles were seen.
109. Fingerprints of Animal blood samples: Fingerprints of animal blood samples shows the molecules indicating the disease, which are used as models of the drug discovery for same disease. But the Prakruthi of the animals is different from humans.

Thus use of animal experiments for drug discovery needs to be relooked. The fingerprints of different animals were provided showing different molecules with specific polarity. These animals might have been used as models for studying a specific disease due to their disease profiles. But the drug may be responding to the respective disease profiles only without indicating any correlation to a human being as the Nature and living conditions of animals and humans are incomparable. Even the drug discovery is conducted on animals of controlled living conditions and diet. But practically it will be impossible in humans. That is why the medicine may be successful in humans. The concept of Prakrithi (Individualization due to variation in physico chemical properties) is not mentioned in animals for the medicines mentioned for use in persons of specific prakrithi. Thus use of animals for validation of activity of a fraction of medicine needs to be re looked. The assessment of physicochemical properties like polarity and quantum of energy (playing more role than structure of the molecule) able to be dealt by the medicine may be a better tool for drug discovery.

110.Fingerprints of different human healthy and diseased were presented.

111.Fingerprints of Healthy human blood samples: This fingerprints of diseased and healthy blood samples were analyzed. The concept of Prakruthi as mentioned in traditional literature, is the basis for any traditional practioner for treatment of a disease in him, the variations due to different energy changes of tridoshas. Thus most of the traditional practices are individualistic.

112-113.Blood samples of Cardiac patients: Blood samples of different patients with heart diseases were fingerprinted. The disease causing component (Shrotavarodha) can be seen. A medicine having the required properties will help for curing the disease. The similar profile can be seen in curd. Traditionally curd is prevented for such kind of patients.

114.Blood samples of different types of patients of hepatic disease: Fingerprints of blood samples of hepatitis patients of B and C indicate constituents at twenty minutes (a specific polarity). Medicine having a constituents at the same time indicates that the method is used for disease identification molecule identification, drug selection, drug targeting and drug monitoring.

115-118.Blood samples of Diabetic patients: Fingerprints of blood samples of diabetic patients show that degeneration is different in different people.

119.Blood samples of Osteo Arthrites patients

120-121.Blood samples of Cancer patients

122.Panchakarma of a Psoriasis patient. Blood before Vamana (Cleansing therapy) and after Vamana were presented. This proves the rationality of Panchakarma therapy used in Indian Systems of medicines.

123-124.Fingerprints of DNA: Fingerprints of animal DNA sample magnified portions show an array of bands of DNA.

125.Fingerprints of blood samples of Osteo Arthrites patients. The Ama is said to be the root cause of this disease. It can be seen in the Kapha zone of the patients. The Vridhi of Pitta and Vata are said to be the factors in such patients traditionally.

126. Fingerprints of blood samples of Rheumatoid Arthrites patients. The Ama is said to be the root cause of this disease also. It can be seen in the Kapha zone of the patients. The Vridhi of Pitta and Vata are said to be the factors in such patients traditionally. The molecule at 30 minutes is seen in patients with this inflammatory, Kapha disease. The same is absent in healthy patient after treatment along with absence of Ama.

127.Fingerprints of Hydrocarbon fuels like Diesel.

128.Fingerprints of Hydrocarbon fuels like Petrol..

129.Fingerprints of Hydrocarbon fuels like Kerosene.

130. Fingerprints of a reaction reagent used in the organic reactions is analyzed. The fingerprint will give information about the mechanism of the reaction how it creates the required end product molecule. The binary molecules at 40 mins, at 25 to 30 minutes and at 5 minutes help for the same.

131.Flow charts of Herboprint

132. Schematic diagram of chromatographic system used.

DETAILED DESCRIPTION OF THE PRESENT INVENTION

Accordingly, the novel basis of the present method is, presenting the molecules (matter) arranged in the order of polarity and their energies of absorption and / or emission properties (radiation) of the chemical constituents present in a medicine, displayed in 3-D and contour chromatograms. This is described as a novel method of Chromatographic Fingerprinting for the assessment of chemical and therapeutic efficacy of medicines. When the energy absorbed or emitted is studied under different conditions like temperature, pH the variations is used for the assessment of efficacy.

When the chemical constituents of a medicine are arranged in the order of polarity and presented along with conjugative property, the chemical profile of the medicine shows correlation with therapeutic efficacy of medicines as said in the traditional philosophies. The Chromatographic Fingerprint generated by this method is providing energy involved due to the conjugative and polarity properties of the individual molecules present in the medicines giving the therapeutic efficacy of the medicine.

The charge or polarity of any molecule depends on different charged functional groups, which will influence the activity of the molecule. In a molecule the UV-Visible absorbance/emission capacity depends on the structure and functional groups of the molecules. When the double or triple bonds are present in the molecules alternatively in the structure, it is called as conjugated. Thus the measurement of these properties will give the therapeutic efficacy of a medicine. The conjugative properties will influence the absorption and emission properties of the constituents and study of these properties will help to understand the molecular properties of the analyte. Hence use of the conjugative and polarity properties of the medicines for therapeutic standardization is the novelty of the proposed method along with the elution pattern of the molecules over a chromatographic separation media.

The present method is proposed for the quality control of herbal medicines and formulations, mostly useful for the assessment of chemical and therapeutic efficacy by using Chromatographic Fingerprinting and standardization (chemical and therapeutic) of traditional medicines. Unlike a method being used for analyzing only active ingredient or lead molecule (which is not known in many herbal medicines) for the analysis of medicines at a single wavelength. It gives the total profile of the chemical constituents present in the traditional medicines along with physical and chemical properties of the compounds (Say UV-Visible absorptive and polarity properties related to efficacy). In the first part of the method, a 2D and 3D image of the Chromatographic Fingerprint of the medicine will be generated. But as an Image cannot become Analytical Data, a computer-based (Microchip, Dongle switch, software and hardware locked) method is developed to

give the Qualitative and quantitative data of the ingredients in the form of an analytical chromatographic report. This was reported in our earlier report (PCT/IN/00123)

As said above the absorptive or emission spectra and polarity of the compounds will indicate the conjugative and polarity properties of the compounds and thus indicating the chemical / medicinal activity of the medicines. This profile of spectra of all the constituents in a single picture, "THE CHROMATOGRAPHIC FINGERPRINT" as proposed now will become the blue print of the constituents present in biological, herbal medicines and formulations. This becomes a method of identification and standardization of herbal medicines than the existing, as the peaks will express the UV-VIS or NIR radiation. Properties or conjugative and polarity properties of the constituents related to efficacy, unlike in a conventional chromatogram taken at a single wavelength along with the quantification of the constituents.

As described in the traditional standardization methods, the colors of the medicines were used to know and standardize their therapeutic efficacy. The colors of the molecules can be understood by their absorptive properties of the radiation of the UV-VIS and NIR range of radiation. The absorbance of a molecule at a particular radiation depends on the structure, functional groups, conjugation, and the extent of unsaturation. Hence the UV-VIS absorbance of any molecule is widely used in the qualitative and quantitative properties of the constituents. The colors and the therapeutic efficacies of various medicines were given in the ancient literature. Fig. 9 of medicines with different colors indicate how efficacy was related to colour of the medicine. When medicines of some color were analyzed a similarity of efficacy was observed.

When the molecules are separated based on the polarity and their absorptive property of a range of electromagnetic radiation indicate the quantum of energy able to be dealt by the molecule. Almost all molecules are majorly absorbing at Ultraviolet radiation. Thus when they are consumed the same radiation present in excessive gets absorbed from the system and the derrangement of energy system gets reverted to normal. Excessive storage of such energy could be the causative factor for a disease and removal of the same radiation leads to bring back the healthy conditions. The medicines, which are red in color, are unable to absorb the respective wavelength of the white light, the material exposed to,

so it is red in color. The energy absorbed by the molecule will be ultra violet wavelength. Thus molecules (subjective) with a specific polarity are absorbing radiation (energy), when a suitable medicine with absorptive property at a suitable wavelength will have a specific efficacy. The causative and curative energy has been dealt by the molecules, which can handle a specific quantum of energy.

Ultimately the colors of the molecules are due to a specific chemical nature of the molecule. When the same is studied the chemical property can also be understood. Thus study and understanding of the interaction of the electromagnetic radiation with matter will be useful to study the chemical nature and thus the therapeutic efficacy of the material under test. The same principle has been used in the present method of Chromatographic Fingerprinting and standardization. Hence the use of Chromatographic Fingerprints for understanding the chemical and therapeutic properties of medicines is proposed as a novel method of standardization and assesses the efficacy of biological and herbal medicines.

The main novelty of the present method involves in the "Arrangement of molecules in a specific order of polarity which is displayed in the chromatographic fingerprint and division of the Chromatographic Fingerprint into different therapeutic zones based on the scales of wavelength (Conjugation) and retention time (Polarity) to understand the therapeutic efficacy (in traditional terms) of a single or a formulated medicine indicated by the energy absorbed-or emitted by the molecule at different pH, temperature, ionic media and viscosity conditions, in a 2-D and 3-D data graph" using an instrumental and software based program. Analysis of the molecular weight of the constituent will add more information and authenticity for standardization.

After developing the analysis data in to a data base the database operations for accessing it for different commercial and regulatory activities ERP&CRM features were added to the software.

Using the computer-based (Microchip, Dongle switch, software and hardware controlled and locked) software developed, a novel chromatogram is generated which shows the conjugative (Wavelength on X axis) and polarity of all the constituents shown in a single Chromatographic Fingerprint. A barcode can also be generated for a selected peak of a molecule given in the image. Where in the X (Retention Time), Y (Wave length in

contour chromatograms and absorbance in 3-D chromatograms), R (The red color indicating the highest concentration of the constituent, G (the green color indicating the lesser concentration of the constituent and B (Blue color indicating still lesser concentration of the constituent) coordinates, provided by the present software is feed in any commercially available re-salable bar coding software's, added in the present software generates a barcode for a single constituent, or for many constituents. The Image of the Chromatographic Fingerprint can be viewed on a display window attached to it. It will be displayed whenever the electronic eye of the vending machine reads the bar code. This makes the image (Finger print) and bar code proprietary for a product of an industry or a country. This is claimed as another novelty of the proposed method. The present method of giving a bar code to a medicinal product for commercial purposes is, by giving a registered number for the said product. It has no relation with the actual chemical constituents and efficacy of the medicines. But in the proposed novel method of bar coding the generation of a bar code for a product based on the chemical profile while doing the analysis it self, will be more regulatory compliance than the existing method under practice.

The data generated at different states is graphically presented in 2D and 3-D data graph, which will be useful for qualitative and quantitative chemical and therapeutic standardization.

The main embodiment of the present invention is to propose a novel method for chemical and therapeutic standardization by detection and identification and chromatographic finger printing of organic, organo metallic and metallic constituents of extracts of plants, animal or geological origin, natural or synthetic sources capable of responding (absorb, emit, reflect, refract or diffract) to different wavelengths of electromagnetic radiations, possessing different chemical and therapeutic properties at different pH, temperature, viscosity and ionic media using their physico chemical properties like polarity, conjugation, mass and total quantum of energy of the analytes.

Another embodiments of the present invention is to identify the molecules in the said compounds by the absorptive, refractive, reflective, and diffractive and emission properties of various constituents in the medicine related to a specific efficacy due to its action on a specific single or multiple pathways.

One more embodiment of the present invention is identifying, determining and classifying the constituents by the absorptive, refractive, reflective, diffractive or emission of an electromagnetic, electrical or magnetic energy of the eluted constituents based on physico chemical properties like polar, medium polar and, less or non-polar properties and conjugation for chemical and therapeutic standardization of the sample analyzed.

Still another embodiment of the present invention is to provide a complete chemical analysis of the constituents present in the medicine under study and their conjugative properties indicating the therapeutic efficacy as per the traditional concepts of the medicine using new software developed.

Another embodiment of the present invention relates to a method, where in a single solvent Ethanol or aqueous Ethanol is used for extraction of the constituents; same analytical conditions and instrumental parameters were used for all samples to bring the therapeutic generalizations there by achieving the therapeutic standardization.

Still another embodiment of the present invention relates to a method, wherein, an inbuilt software provides a novel concept of chromatographic finger printing of herbal medicines that will be useful for the quick identification of the actual profile of the compounds present in the medicine under use along with their therapeutic efficacy of the constituents.

Yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the atoms/ molecules are separated using a chromatographic method of separation and arranged in the specific order of polarity along with conjugative property measuring the absorptive and emission property of an electromagnetic radiation by the analytes.

Still another embodiment of the present invention is to provide a soft ware capable of analyzing (extracting colors) the colored contour and 3-D chromatographic image based on various colors with respect to a specific energy as presented in the energy box. The box denoting the concentrations and energies of various constituents eluted with time having arranged in a specific order of polarity indicated as retention time at a specific pH, temperature, viscosity and ionic media.

Still another embodiment of the present invention relates to a method, wherein, an inbuilt software provides a novel chromatographic finger printing of herbal medicines and formulations analyzed and are developed on a electromagnetic radiation detector like Photo Diode array Detector (PDA) connected to a chromatographic instrument like High Pressure Liquid Chromatograph, which delineates the data of the spectral properties of the constituents present in the material having the medicinal value, presented in a specific order of physico chemical properties like polarity along with conjugation generated under similar experimental analytical conditions.

Still another embodiment of the present invention relates to a method used as a data processor of 3 D data graphs and color contour image of an ingredient.

Still another embodiment of the present invention relates to a method which uses solvents for extraction, are selected based on the polarity, hydrophilic and hydrophobic nature of the constituents of the sample under study.

Still another embodiment of the present invention relates to a method wherein, the polarity of the mobile phase of a non-aqueous and an aqueous solvent of a specific pH is controlled by varying the ratio of the mobile phase from 0% to 100% of an aqueous solvents like water or a buffer of a known pH, along with a non-aqueous solvent and vice-versa.

Still another embodiment of the present invention relates to a method wherein, on analysis of 3-D and contour chromatograms using new software, gives a data having indicated the vitiation of doshas quantitatively in percentage ratio.

Still another embodiment of the present invention relates to a method of Chromatographic Fingerprinting to assess the healthy or diseased patterns of a human being, animal or a microorganism, which helps for different purposes of disease identification, disease monitoring, drug selection, drug targeting and drug monitoring.

Still another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the atoms/ molecules are separated and arranged in the specific order of polarity along with conjugative property measuring the absorbance, emission, reflection, refraction or diffraction properties of an electromagnetic radiation by the analytes.

In still another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the 3-D box is the container of the three energies where in the constituents of different properties will be having the polarity.

In still another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the 3-D box is the container of the three types of molecules with specific energies where in, the constituents with known properties of the molecular structure, mass, polarity and conjugation will be indicating the chemical and therapeutic properties of the constituents and the medicines.

In still another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the molecules are eluted in a specific order of polarity with a range of conjugative property using detectors with measurement of absorbance, emission, reflection, refraction or diffraction properties of matter when exposed to electromagnetic radiation, along with conductivity, molecular structure and mass is useful for the chemical and therapeutic standardization.

In still another embodiment of the present invention relates to a method capable of Chromatographic Fingerprinting where in the molecules are arranged in a specific order of physico chemical properties for chemical and therapeutic standardization.

In still another embodiment of the present invention relates to a method capable of Chromatographic Fingerprinting where in the molecules in a sample matrix are separated by means of a chromatographic technique and arrange in a specific order of polarity for chemical and therapeutic standardization based on the polarity along with conjugation properties.

In still another embodiment of the present invention relates to a method capable of analyzing a sample at different electromagnetic radiations, polarity, viscosity and temperature using suitable pumps to pump the liquids of mobile phase, having a detector which can measure the absorbance, emission, reflection, refraction or diffraction properties of analyte samples in a selected range of wavelength, having a software generating analysis data after coordination and compilation of signals from different types of detectors and analyzing the data for chemical and therapeutic standardization, generating barcode for the data generated after analysis and finally arranging the data in specific data base folders.

In still another embodiment of the present invention relates to a method capable of Chromatographic Fingerprinting where in the physico chemical properties of the carrier are varied for eluting the molecules of a sample matrix to be separated on a chromatographic separation media of a planar or closed chromatographic system for chemical and therapeutic standardization.

In still another embodiment of the present invention relates to a method capable of Chromatographic Fingerprinting where in the analytes after separated on a chromatographic system under different conditions of temperature, pH and viscosity and detected with detectors able to detect the mass, fragmentation pattern, conductivity, polarity, refraction, reflection, diffraction, absorptive and emissive properties of the analytes over a range of electromagnetic radiation for chemical and therapeutic standardization of natural, biological and synthetic materials and medicines.

In still another embodiment of the present invention relates to a detection system which arrays the results of interaction of radiation with matter for the molecules arranged in a specific order of polarity and results in interpretation of the chemical and therapeutic properties of analyte sample.

In still another embodiment of the present invention relates to a method as, where in the chemical and therapeutic standardization is assessed for a material using the absorptive, refraction, reflection, diffraction and emissive properties of the molecules at a specific single or multiple wavelengths of radiation energy ranges to which the matter is exposed.

In still another embodiment of the present invention relates to a method of chromatographic system having the data generated due to the separation of analytes over a separation media under specified analytical conditions leading to chemical and therapeutic standardization of the analytes under test.

In still another embodiment of the present invention relates to a method of chromatographic system for chemical and therapeutic standardization based on the pattern of the energy data graphs generated due to the interaction of radiation with matter in a detection system to which the matter is exposed to.

In still another embodiment of the present invention relates to a method of bio informatics to assess the efficacy of a medicine and a diseases pattern/status of a living being for

disease identification, disease monitoring, drug identification, drug targeting, drug selection, drug monitoring and drug interaction with biological systems

In still another embodiment of the present invention relates to a method, where in the solvents of different polarities are used for extraction based on the hydrophilic and hydrophobic nature of the sample and the constituents under study, generally ethyl alcohol is used as solvent for preparation and standardization of medicines.

In still another embodiment of the present invention relates to a method, where in the Chromatographic Fingerprints can be developed for a same medicine extracted under different pH, polarity, viscosity, ionic media and temperature values.

Still another embodiment of the present invention relates to a method, the said method is carried out using standard analytical parameters like extraction with ethyl alcohol, maintaining a regular run time although the analysis of samples, eluting with a mobile phase of acetonitrile and phosphate buffer having a pH range of 3-9, electromagnetic radiation range of 200-800nm or below or beyond using a suitable and capable detector, maintaining column, total flow line and detector in the temperature range of 15-70° C, a mobile phase conductivity range of 0 to 50 X 10³ mhos.

In still another embodiment of the present invention relates to a method, wherein the non-aqueous, organic and aqueous, water or buffer used under specified pH, viscosity, ionic media and temperature are selected based on the range of pH, viscosity, ionic media, temperature and polarity required.

In still another embodiment of the present invention relates to a method, wherein converting the analytical data into a colored image or an analyzable data comprising the conjugative and polarity properties along with quantum and quantitative data of the constituents of the medicine under study.

In still another embodiment of the present invention relates to a method, where in the therapeutic efficacy of a medicine (Single or formulated) is assessed using the quality of the constituents present in a particular polarity and electromagnetic radiation for refraction, reflection, diffraction, absorptive and emissive responses and the data graphs with X, Y, Z coordinate points indicating specific property in different of zones of the Chromatographic Fingerprint.

In still another embodiment of the present invention relates to a method, where in the software generates a bar code for the properties of the images like a selected peak or peaks or whole image or movie using the X (Retention Time), Y (Wavelength), Z (Absorbance, In case of 3-D image and movie file like Avi, Mpeg etc), R (Number Of Red Pixels), G (Number Of Green Pixels And B (Number Of Blue Pixels) coordinates, provided by the software, which makes the product propriety for an industry.

In still another embodiment of the present invention relates to a method, where in the solvents used for extraction is selected based on the polarity, hydrophilic and hydrophobic nature of the constituents, sample and its constituents under study.

In still another embodiment of the present invention relates to a method, wherein the polarity of the mobile phase of a non-aqueous and an aqueous solvent of a specific pH, is controlled by varying the ratio of the mobile phase from 0% to 100% and vice-versa of an non aqueous solvents like acetonitrile, methanol aqueous solvents like phosphate buffer.

In still another embodiment of the present invention relates to a computational method of chromatographic finger printing, chemical and therapeutic standardization and bar coding of Organic, Organo-metallic and metallic atoms or molecules from a plant, animal, a naturally available or man-made materials used as medicines.

In still another embodiment of the present invention relates to a method wherein it provides absorption/ emission spectra of the compounds having displayed the conjugative and polarity properties of the molecules and the concentration of the individual concentrations of the molecules along with the polarity and quantum of energy of the molecules.

In still another embodiment of the present invention relates to a method where in the chemical and therapeutic standardization is achieved by interaction of matter to different individual electromagnetic radiations when the data is presented as chromatographic fingerprint.

In still another embodiment of the present invention relates to a method wherein, same standard analytical parameters like Extraction with same solvent Ethyl alcohol, same run time, same mobile phase acetonitrile along with phosphate buffer in a specific pH in the

range of 3-9, same conductivity range of $0-50 \times 10^3$ mhos and a same range of Electro Magnetic radiation from 200nm – 800nm is used for Chromatographic Fingerprinting and chemical and therapeutic standardization along with subjecting the samples to different variable analytical factors like pH, temperature, column length, run time and Polarity of the stationary phase and mobile phase and maintaining the same order of arrangement of the molecules based on polarity, and molecular size in the specific order, is the basis of the assessment of chemical and therapeutic quality of the samples under study.

In still another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the measurement of absorbance energy is indicating the activity of a constituent in absorbing the respective quantum of energy at a specific X, Y, Z position of the energy system with specific polarity and conjugative properties from the diseased conditions making to cure the disease pattern and hence therapeutically indicative.

In still another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the respective zones and X, Y, Z coordinates of the constituents have a specific property of chemical and therapeutic efficacy of the analyte constituents present in a medicine.

In still another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in influence of variable factors like temperature, pressure, pH, ionic media and viscosity of the mobile phase, stationary phase and sample will be influenced to arrange the atoms and molecules in a specific order of polarity whose conjugation and molecular structure will be analyzed along with conductivity will be useful for the chemical and therapeutic standardization.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the gradient, ternary or quaternary run of the mobile phase ends at the ratio where it starts.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting using which the interpretation of the activity of the analyte atom or molecules and their energies having a specific quantum of energy along

with structural properties relates to their chemical and bio chemical, and biophysical activities.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting using which the interaction of molecules of different polarities is assessed when they are arranged in the order of polarity.

In yet another embodiment of the present invention relates to a method as, where in the temperature, pH and polarity of the mobile phase is controlled by varying the temperature, the ratio of the mobile phase of a solvent between 0 to 100% of an aqueous solvent like Water or a phosphate buffer at a required pH by using suitable buffer to maintain the required pH, polarity and ending at the ratio where it started with a non-aqueous solvent by a gradient, ternary or quaternary run.

In yet another embodiment of the present invention relates to a method, wherein the non-aqueous, organic and aqueous, water or buffer at a known temperature, viscosity and pH are solvents used are selected based on the range of temperature, viscosity, ionic media, pH and polarity required.

In yet another embodiment of the present invention relates to a method, wherein, same standard analytical parameters like Extraction, run time, mobile phase, range of Electro Magnetic radiation influenced by variable factors like pH, temperature, column length, run time, Polarity of the column, stationary phase and mobile phase, maintaining the same order of arrangement of the molecules based on polarity and molecular size in the specified order are used to achieve chemical and therapeutic standardization.

In yet another embodiment of the present invention relates to a method, for chemical and therapeutic standardization based on the pattern of the energy data graphs generated due to the inter action of radiation with matter in a detection system to which the matter is exposed to, after an orderly separation.

In yet another embodiment of the present invention relates to a method, a bio informatics tool to assess the efficacy of a medicine and a diseases pattern/status of a living being for disease identification, drug identification, drug targeting, drug selection, drug monitoring and drug inter action with biological systems.

In yet another embodiment of the present invention relates to use of Chromatographic Fingerprints of contour and 3 -D chromatograms of the constituents as claimed in any of the proceeding claims are the basis for identification of chemical constituents for chemical and therapeutic standardization.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the method enables to understand and standardize the variations in Physico-Chemical properties of the medicines in the form of energy variations, different states of three energies. These variations are present in medicine and living beings used for the therapeutic standardization using conjugative and polarity properties of the medicines shown in chromatographic fingerprints.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting using which the variable factors like temperature, humidity, viscosity, ionic nature etc., on the physico chemical properties and thus therapeutic efficacy of a medicine can be assessed using the 3-D energy box.

In yet another embodiment of the present invention relates to a method, where in preparation of a database of a large number of samples will give many generalizations of the therapeutic efficacy of a particular group of plants or animals classified as a group for a particular disease for therapeutic identification, classification, standardization and monitoring.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the atoms/ molecules are separated using a chromatographic method of separation and arranged in the specific order of polarity using a separation technique where in the variable parameters like polarity, pH, temperature, ionic and electrical charge and viscosity of the reaction media, mobile phase, stationary phase and sample under analysis which will be varied leading to the interpretation of the Tridosha properties and efficacy of the same.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the absorption and emission of the electromagnetic radiation by analyte constituents in a medicine along with polarity property will help to understand the efficacy of the same and the efficacy is due to these two basic properties.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the 3-D box is the container of the three energies where in the constituents of Agni in nature or in the first zone of the Chromatographic Fingerprint, Jala property in the second zone of the Chromatographic Fingerprinting and Prithvi in the last zone. The Vayu is present in the last zone and in the area where in there in no constituents were present in the entire container.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the chemical profile in diseased and healthy blood samples can be studied in a microorganism, animal and human being to correlate the disease profile with chemical profile indicating the relation of polarity and conjugation for drug selection, drug identification, drug targeting and drug monitoring.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the energy at different doshas at deficient, sufficient and excessive states of levels indicating the energy variations of natural microorganism, animal and human being along with medicines and synthetic materials.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting using which therapeutic grouping of constituents and medicines can be done based on the said atomic and molecular properties.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting useful for the assay of the taste and its order, color of transmission and absorption and odor will be done at different levels of energy variations to understand the process of biotransformation and biogenesis.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the traditional properties mentioned in the basic concepts mentioned in the traditional philosophies were correlated to the physico chemical properties of the medicines.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the physico chemical properties like polarity, conjugation and quantum of energy of the atoms and molecules are useful to identify the bio chemical pathways having the same properties involving a specific energy.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting useful for understanding the evolution of the dosha and dhatu properties of the medicines in living and non-living things.

In yet another embodiment of the present invention relates to a method of chromatographic fingerprinting of the native medicines of a particular place or country to develop suitable traditional philosophies and dictionaries for the chemical and therapeutic standardization.

In yet another embodiment of the present invention relates to a method of chromatographic fingerprinting of the blood samples of living beings of a particular place or country to develop suitable traditional medical philosophies and dictionaries for the chemical and therapeutic standardization.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting as, wherein the method enables to understand and standardize the variations in Physico-Chemical properties of the medicines in the form of energy variations of different states of Tri dosha energies present in medicine and living beings, for chemical, clinical and therapeutic standardization.

In yet another embodiment of the present invention relates to a method, where in the Chemical and therapeutic standardization properties are assessed for a material using the absorbance, emission, reflection, interference, refraction and diffraction of the molecules at a specific single or multiple wavelengths range to which the matter is exposed and the data is interpreted for single and multiples of wavelengths in a fingerprint.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting for creation, improving, altering and modifying the capability of hard wares and soft wares useful for drug discovery.

In yet another embodiment of the present invention relates to a method of Chromatographic Fingerprinting where in the arrangement of molecules in a specific order of physico chemical properties after separation on a separation media for chemical and therapeutic standardization with and with out recycling the eluent molecules either in to the same column or in to a battery of separation systems.

In yet another embodiment of the present invention relates to a thermally protected and controlled system containing the separation media of stationary and mobile phases,

detector flow cell system along with the flow line to develop chromatographic fingerprinting for chemical and therapeutic standardizations.

In yet another embodiment of the present invention relates to a detector flow cell with thermally varying and controlling facility which change the temperatures as programmed and detect the bathochromic, hypso chromic, hyper chromic and hypo chromic variations of the spectrum at varying analytical conditions, of the samples passing through the flow cell for chromatographic fingerprinting for chemical and therapeutic standardizations.

In yet another embodiment of the present invention relates to a One of the present embodiment of the present invention relates to a method for the standardization of matter and radiation for the assessment of the quantum energy they can deal and arrange the matter in an order based on their physico chemical properties and kinetics.

In yet another embodiment of the present invention relates to a method for the standardization of matter and radiation for the assessment of the quantum energy they can deal and arrange the matter in an order based on their physico chemical properties and kinetics for quantum chemical studies.

In yet another embodiment of the present invention relates to a method of Chromatographic Finger Printing, the data is obtained for identifying the chemical constituents present in it for the purpose of chemical, therapeutic and process standardization and quality control activities of African, Allopathic, Ayurvedic, Chinese, Homoeo, Kampo (Japanese), Siddha, Unani and Tibetan medicines or any medicines.

In yet another embodiment of the present invention relates to a method for the standardization of matter and radiation for the assessment of the quantum energy they can deal and arrange the matter in an order based on their physico chemical properties and kinetics for quantum bio chemical studies.

In yet another embodiment of the present invention relates to a method for the standardization of matter and radiation for the assessment of the quantum energy they can deal and arrange the matter in an order based on their physico chemical properties and kinetics for quantum bio physical studies.

In yet another embodiment of the present invention relates to a method for the standardization of matter and radiation for the assessment of the quantum energy they

contain and arrange the matter in an order based on their physico chemical properties and kinetics for quantum chemical studies by using an equation $E = m^{+P} C^{\lambda}$ Where in m is the mass, p is polarity at specific temperature and pressure of the analyte material and C is the speed of the respective radiation.

In yet another embodiment of the present invention relates to a method for the standardization of matter for the assessment of the chemical, therapeutic and biological properties by the generalization of their commonalities and differences in the profile.

In yet another embodiment of the present invention relates to a method of analysis using the patterns of electromagnetic radiations absorbed or emitted, generated for a sample for chemical and therapeutic standardization.

In yet another embodiment of the present invention relates to a method of analysis using the graphical data patterns of electromagnetic radiations absorbed, emitted, reflected, refracted, interference, diffracted with the analyte and generate data for a sample by a separation method using different properties of the carrier media to separate over a separation media, separating and arranging the constituents in a specific order of polarity along with measured responses of the constituents with interaction of electromagnetic radiations for chemical and therapeutic standardization of material under test.

In yet another embodiment of the present invention relates to a method of analysis for the standardization of organic reagents for chemical and activity standardization.

In yet another embodiment of the present invention relates to a chromatographic fingerprinting method of analysis for the chemical and therapeutic standardization of Nanoparticles in materials.

In yet another embodiment of the present invention relates to a Chromatographic fingerprinting method for the chemical and therapeutic standardization of nutritional values of foods, nutritional dietetics and nutritional genomics.

In yet another embodiment of the present invention relates to a method of chromatographic fingerprinting for the chemical and therapeutic properties of proteins and genetic material for proteomics and genomics studies.

One of the embodiments of the present invention relates to a method of chromatographic fingerprinting which provides the properties of the analyte with out a referral standard.

In yet another embodiment of the present invention relates to a software capable of interpreting constituents between 0-20 minutes as Pitta in nature which are in Zone 1, of the image where in 0 minutes is acute and 20 is chronic.

In yet another embodiment of the present invention relates to a software capable of interpreting Constituents in the range of retention times 20-40, as Kapha in nature which are in Zone 2, of the image where in where in the constituents at 20min acts on acute and 40min acts on chronic conditions.

In yet another embodiment of the present invention relates to a software capable of generating a chromatogram based on the color analyzed (Extracted from finger print using a Graphic User Interface software developed), having peaks at various retention times along with different physico chemical properties like conjugative and polarity properties of the analyte constituents eluted with time.

In yet another embodiment of the present invention relates to a software capable of interpreting Constituents in the range of retention times 40-60, as Vata in nature which are in Zone 3, of the image where in where in constituents at 40 acts on acute and 60 is chronic conditions.

In yet another embodiment of the present invention relates to a software capable of interpreting Constituents in the range of retention times 5-15, as Kashaya, Astringent, in nature which are in Zone 1, of the image.

In yet another embodiment of the present invention relates to a software capable of interpreting Constituents in the range of retention times 15-20 min, as Katu, Pungent, in nature which are in Zone 1, of the image.

In yet another embodiment of the present invention relates to a software capable of interpreting Constituents in the range of retention times 25-35, as Tikta, Bitter, in nature which are in Zone 2, of the image.

In yet another embodiment of the present invention relates to a software capable of interpreting Constituents in the range of retention times 25-35, as Lavana, Salty, in nature which are in Zone 2, of the image.

In yet another embodiment of the present invention relates to a software capable of interpreting Constituents in the range of retention times 30-40, as Amla, Sour, in nature which are in Zone 2, of the image.

In yet another embodiment of the present invention relates to a software capable of interpreting Constituents in the range of retention times 35-55, as Madhura, in nature, which are in Zone 2 and 3, of the image.

In yet another embodiment of the present invention relates to a software capable of interpreting Constituents absorbing from 200-800 nm, as Dosha kara/Vridhi, in nature which are in Zone 1,2 and 3, of the image when a sample is analyzed on a separation media and molecules arranged in an order of polarity.

In yet another embodiment of the present invention relates to a software capable of interpreting Constituents absorbing from 200-400 nm, as Increase of respective conjugative property said to be Dosha hara, in nature which are in Zone 1,2 and 3, of the image when a sample is analyzed on a separation media and molecules arranged in an order of polarity.

In yet another embodiment of the present invention relates to a software capable of interpreting Constituents absorbing from 200-800 nm, as Increase of respective property will be Sheeta Veerya, in nature which are in Zone 2, of the image when a sample is analyzed using a separation media.

In yet another embodiment of the present invention relates to a software capable of interpreting Constituents absorbing from 200-800 nm, as Increase of respective property will be Ushna Veerya, in nature which are in Zone 1, of the image when a sample is analyzed using a separation media.

In yet another embodiment of the present invention relates to a software capable of interpreting the Vipaka (Post assimilative) property, which is absent before and present after interacting with an enzyme in a medicine/biological fluid.

In yet another embodiment of the present invention relates to a software capable of interpreting the Sookshma property (Smaller molecules or absorbing sharply at lesser wave lengths, 190-220 nm), which are in Zone 1,2 and 3, of the image when a sample is analyzed using a separation media.

In yet another embodiment of the present invention relates to a software capable of interpreting the Rooksha (Volatile high to medium polar molecules) property based on the absorption spectra and polarity of the ingredients in Zone 1,2 and 3, of the image when a sample is analyzed using a separation media.

In yet another embodiment of the present invention relates to a software capable of interpreting the Snidha (Viscous medium to non polar molecules) property based on the absorption spectra of 200-800 nm and polarity of the ingredients in Zone 1,2 and 3, of the image when a sample is analyzed using a separation media.

In yet another embodiment of the present invention relates to a software capable of interpreting the Laghu property based on the absorption spectra, polarity and less number of ingredients in Zone 1,2 and 3, of the image when a sample is analyzed using a separation media.

In yet another embodiment of the present invention relates to a software capable of interpreting the Guru property based on the absorption spectra, polarity and large number of ingredients in Zone 1,2 and 3, of the image when a sample is analyzed using a separation media.

In yet another embodiment of the present invention relates to a software capable of interpreting the Sandra (Viscous molecules) property based on the absorption spectra of 200-800 nm and polarity of the ingredients in Zone 2, of the image when a sample is analyzed using a separation media.

In yet another embodiment of the present invention relates to a software capable of interpreting the Sthoola (heavy molecules) property based on the absorption spectra and polarity of the ingredients in Zone 3, of the image when a sample is analyzed using a separation media.

One of the embodiments of the present invention relates to a software capable of interpreting the chemical and therapeutic property of the analyte based on the 3-D and contour chromatographic fingerprints developed due to the interaction of radiation with matter and the data graph divided in to different zones and marked with respective

therapeutic property based on specific X, Y and Z coordinates of the data graph or movie, wherein the retention time value is not a limitation

In another embodiment of the present invention relates to a method of Chromatographic Fingerprinting useful for chemical and therapeutic standardization of petroleum products.

In another embodiment of the present invention relates to a method of Chromatographic Fingerprinting useful for the standardization of agricultural products.

In another embodiment of the present invention relates to a method of Chromatographic Fingerprinting useful as a diagnostic tool for the analysis of healthy and diseased samples for chemical and therapeutic standardization

In another embodiment of the present invention relates to a method of Chromatographic Fingerprinting useful for the toxicity studies for chemical and therapeutic standardization.

In another embodiment of the present invention relates to a method of Chromatographic Fingerprinting useful in chemical and therapeutic standardization of forensic sciences.

In another embodiment of the present invention relates to a method of Chromatographic Fingerprinting useful for the chemical and therapeutic standardization of industrial products.

In another embodiment of the present invention relates to a method of Chromatographic Fingerprinting for the chemical and therapeutic standardization of environmental samples.

In another embodiment of the present invention relates to a method of Chromatographic Fingerprints of data graphs of the analyte will be the basis for identification and standardization of chemical constituents to limit the scope of the invention.

In another embodiment of the present invention relates to a method of Chromatographic Fingerprint data is used for the study of variation of chemical constituents in biological samples and to identify and standardize the chemical constituents in them to know the pathological, healthy and diseased status of the source living being thus leading to chemical and therapeutic standardization.

In another embodiment of the present invention relates to a method of, Chromatographic Fingerprinting used for the adulterated, substituted, contradictual, commercial food and drug samples and to identify the chemical and therapeutic properties of pure and impure.

In another present embodiment of the present invention relates to a method of wherein, the data obtained is used for the study of variation of chemical and therapeutic properties of the constituents due to various ecological factors, geological factors, genotype and phenotypic variations (in plant and animals) in naturally occurring samples and to identify and standardize the chemical constituents in them.

In another present embodiment of the present invention relates to a method of wherein, the data obtained is used for the study of chemical constituents in synthetically prepared samples and to identify and standardize the chemical constituents in them for chemical and therapeutic standardization which ever is applicable.

In another present embodiment of the present invention relates to a method of Chromatographic fingerprinting wherein, the data obtained is used for the study of chemical constituents in herbal products of single medicine samples and to identify the chemical constituents in them for chemical and therapeutic standardization.

In another present embodiment of the present invention relates to a method of Chromatographic fingerprinting wherein, the data chromatograph is used for the study of chemical constituents in herbal products of formulated medicine samples and to identify the chemical constituents in them for chemical and therapeutic standardization.

In another embodiment of the present invention relates to a method of Chromatographic fingerprinting wherein, the data obtained is used for the study of variation of chemical constituents in different brands of products of single and formulated food and medicine samples and to identify the chemical constituents in them for chemical and therapeutic standardization.

In another embodiment of the present invention relates to a method of Chromatographic fingerprinting wherein, the data of medicines facilitates to categorize and quantify the constituents of a medicine based on polarity and conjugation from 3-D and contour chromatograms and assess the therapeutic efficacy of the medicine on which humors it is going to act (vitiates, balance).

In another embodiment of the present invention relates to a method of Chromatographic fingerprinting wherein, the data obtained enables to understand and standardize the Physico-Chemical properties of the medicines like color for the use of therapeutic

standardization of medicines and humors (Tri Doshas) using conjugative and polarity properties given in the chromatographic fingerprints.

In another embodiment of the present invention relates to a method of chromatographic fingerprinting which enables to understand and standardize the microcosm and macrocosm of the medicines used for therapeutic standardization using conjugative (indicated on Y-axis) and polarity (indicated on X axis) properties given in the chromatographic fingerprints.

In another embodiment of the present invention relates to a method of Chromatographic fingerprinting wherein, the method enables to understand and standardize the Physico-Chemical properties of the medicines like Tastes (Rasa) like Sweet, Sour, Salty, Pungent, Bitter and Astringent (Madhura, Amla, Lavana, Tikta, Katu and Kashaya as described in Ayurveda) used for therapeutic standardization using conjugative and polarity properties given in the chromatographic fingerprints.

In another embodiment of the present invention relates to a method of Chromatographic fingerprinting, wherein the data obtained enables to understand and standardize the Physico-Chemical properties of the medicines like Property, Potency, Metabolite, Specific properties like Chirality of the molecules (Guna, Veerya, Vipaka, Prabhava) used for the therapeutic standardization using conjugative and polarity properties of the individual constituents and the whole medicine shown in the chromatographic fingerprints.

In another embodiment of the present invention relates to a method of Chromatographic fingerprinting wherein, the data enable to understand and standardize the Physico-Chemical properties (Gunas) of the medicines like Cold, Hot, Slow in action, Sharp in action, Heavy, Light, Soft Lubricated Supple, Dry (Sheeta, Ushna, Manda, Teekshna, Guru, Laghu, Snigdha, Rooksha as described in Ayurveda) used for the therapeutic standardization using conjugative and polarity properties of the medicines shown in chromatographic fingerprints.

PROPOSED METHOD OF CHEMICAL STANDARDIZATION

Hence UNLIKE a method currently under use, where in a chromatogram is given at a single wavelength, a novel method of chromatographic standardization, finger printing and bar coding is proposed, using contour and 3-D chromatograms. It provides the TOTAL

CHEMICAL PROFILE (properties like polarity and conjugation, there in) of the chemical constituents present in complex medicines like herbal medicines and formulations or any medicine. Further bar coding the finger prints thus generated will provide many commercial features in dealing such medicines using the ENTERPRISE RESOURCE PLANNING (ERP) and CUSTOMER RELATIONSHIP MANAGEMENT (CRM) applications.

The existing method of TLC Chromatographic Fingerprinting being used as a chromatographic finger print, is showing only an assay of the constituents present in it. It is not providing any chemical property like conjugation or polarity. Another method of Chromatographic Fingerprinting by HPLC shows a chromatogram at a single wavelength presented as a "CHROMATOGRAPHIC FINGER PRINT" of the medicine. In this, a selected peak is identified chemically, what it is by structure, using various other analytical techniques like NMR, LC-MS and IR for structural elucidation. So the single chromatogram by it self is not able to say what the efficacy of the medicine is, with out the support of other costlier analytical instruments. It will be highly impractical to use such costly techniques for a complex herbal medicine and formulations prepared by formulating various organic and inorganic medicines for a particular therapeutic purpose.

The quality of any formulated medicine will depend on the process with which it was made. This will be different for each pharmacy or pharmacist. What actually needed for the quality control of herbal medicines and formulations is a simple analytical method that can give the number of constituents (qualitative and quantitative) present in a single medicine or formulation, and the therapeutic efficacy of the medicine under study. Hence any method, which does not provide the above information, will be incomplete.

In the proposed method of chemical standardization the constituents were first extracted in to a suitable solvent. The extract was subjected to separation into individual constituents on a High Pressure Liquid Chromatograph under standardized analytical conditions. The 3-D and contour chromatograms given by the instrument were converted in to CHROMATOGRAPHIC FINGERPRINT data graphs. The images were analyzed using image analysis software specially prepared for this work. The out put data is interpreted for

the said standardization. Detailed description of the method is given in experimental description of the method.

PROPOSED METHOD OF THERAPEUTIC STANDARDIZATION:

The traditional therapeutic standardization is highly individualistic by ability and perception of the doctor. A general availability of such method will be practically difficult. But the existing scientific scenario emphasizes that any method or mechanism needs to be STANDARDIZED, and REPRODUCIBLE. Hence in the present method of chemical and therapeutic standardization an instrumental method is proposed which brings down the human factor. The proposed method envisages the same with out deviating from the traditional concepts.

As explained above if one can assess the therapeutic efficacy of the medicine by the physico-chemical properties (Polarity and conjugation), the activity of the medicines can be understood thus achieving the therapeutic standardization. In the present method the CONJUGATIVE AND POLARITY properties are taken in to consideration to assess the therapeutic efficacy of a medicine.

In the ancient literature a clear classification of soils and plants were given based on their physico-chemical nature and therapeutic efficacy. The selection of medicines for a particular disease was done based on the guidelines like color, texture, odor and physical appearance. The soil types and the diversity of the drug action were also mentioned while selecting a medicine. The effect of climate and its effect in the efficacy on the drug plants were also clearly mentioned. Because the chemical constituents present in the plant depends on these geological and ecological variable factors, guide lines were laid down for the place of collection, time (seasonal and daily) of collection, part of plant for collection and age of plant for collection, required for a specific therapeutic action Some of the examples of the Chromatographic Fingerprints show the same.

This confirms that this method will be useful in many purposes of dealing the traditional medicines. It can be useful for modern medicines also to understand their therapeutic efficacy in traditional terms.

VARIOUS STEPS INVOLVED IN THE PRESENT INVENTION:

In the present method of analysis a Validated High Pressure Liquid Chromatograph equipped with a Binary or ternary Gradient system of pumps, a Photo Diode Array Detector (PDA), suitable instruments for measurement of conductivity and mass of the analytes are used along with a Software based data processor for presentation of the chromatographic fingerprints were used. After the complete elution of all ingredients, the 3D and contour chromatograms (having the information of the UV -Visible Spectra, absorbance and retention times of all the constituents present in a single medicine or formulation) were converted into a data graph image and proposed as a Chromatographic Fingerprint. This enjoys the merit of not requiring any internal or external standard sample for an authentic qualitative and quantitative analysis of all the ingredients present in a medicine, unlike in the present method of analysis of medicines.

Experimental Description of the method:

The proposed method is described in 4 steps with reference to the accompanying drawings, flow charts and examples, which are provided to illustrate some of the embodiments of the invention, and the same should not be construed as limitations on the inventive concept embodied herein. The entire method is described in the steps mentioned below.

The procedure is explained in the following steps

Step 1: Sample preparation

Step2: Experimental work done on the instrument

Step3: Data generation and analysis.

Step4: Interpretation of the Chromatographic Fingerprints.

Step5: Applications of the method.

Step 1: Sample preparation

All samples were extracted with Ethyl alcohol and preferably with buffer of specific pH if required. When the pH of the aqueous alcohol extract is varied the extraction of constituents also has varied. The basic pH has extracted more number of constituents

than acidic pH. Suitable pH was selected for extraction of different medicines for selective extraction using buffers.

Step2: Experimental work done on the instrument

The Development

The extract was subjected to separation analysis, using High-Pressure Liquid Chromatographic instrument. In the present method of analysis a Validated High Pressure Liquid Chromatograph equipped with a Binary or a ternary Gradient system of pumps, a Photo Diode Array Detector (PDA), a conductivity detector or sensor and a Software based data processor, for the preparation of the chromatographic fingerprints were used. A known amount of the sample (say 20ul) of extract is injected into rheodyne injector (fitted with 20ul loop). Elution of the sample was performed with suitable time programmed gradient system of mobile phase at a fixed flow (1 ml/min). Care is taken that no part of the sample is left in the column un-eluted. The following analytical conditions set for the analysis.

- a. A reverse phase column was used along with a time programmed gradient elution of an aqueous phosphate buffer (In the pH range of 3.0-9.0) and a non-aqueous solvents (acetonitrile or methanol) as eluents, based on the chemical nature of the sample under analysis.
- b. A wavelength range of 200 to 800nm was used for the PDA detector and the run time is fixed based on the time program. The range of wavelength will be up to 1100nm based on the model of detector used.
- c. The change in the concentration of non-aqueous solvent like Acetonitrile along with an aqueous mobile phase like phosphate buffer in the pH range of 3.0-9.0 as a gradient in the varying ratio 0-100% of non aqueous solvent with in a stipulated time of run with covering the entire range of polarity was used for elution. The composition of the mobile phase will end where it started. The polarity measured will help to select the required range of polarity to be covered for the total elution of the constituents. The time is not a limitation if the entire range of polarity could be covered in lesser time with out

sacrificing the resolution by changing the column size, particle size, temperature, pH, viscosity, ionic nature of the whole media and other variable parameters that influence the elution pattern.

- d. The gradient of solvents, temperature & pH used for the elution of the molecules.
- e. Elution of same sample at different temperatures in the range of 0-60 °C and different pH values in the entire range of pH and polarity required.

The instrument was triggered for the analysis after injecting the sample into the injector. The run was stopped whenever the analysis is completed or the instrument will stop the run automatically after the entire time program is completed. Mostly the time of analysis was fixed based on the dimensions of the column and decided by the absorption of the eluting compounds.

The Separation

When a chemical constituent is in liquid, if it is immiscible in the liquid, it will not get dissolved and does not interact with the media or the constituents in the media. There is no interaction between both. If the constituent is miscible then it should be charged, compatible to the media. If it is anionic, then it will bond with the cationic (like Hydrogen in water) component of the media or any such ion present in the media. It may also bond with anionic part of the media. Thus it will form a new soluble or insoluble moiety in the medium. The new moiety will be come a foreign body in the media container, which will have its own physico chemical properties. If the molecule is zwitter ionic then both reactions will happen. In water type of solvents are used then hydrogen bonding will also influence the interactions among the ionic molecules along with already happening ionic, covalent or coordinate covalent bonding among the ionic constituents present in the media.

If a material moves over a smooth surface, it simply moves from one place to another, with out any interaction with in no time if there is no inertia, due to any interaction between both. If the constituent is charged then it will interact with the charged surface at different rates and intensities and its movement will get influenced. The

interactions depend upon the charges of the surface and the moving molecule. When the movement of the material is due to a third factor, and it is charged/uncharged, it also influences the movement of the material.

When a charged/ uncharged molecule is made to move over a charged surface like a stationary phase of a chromatographic column, the velocity/ movement of the molecule will depend on the total charge interactions of the molecules, media and surface. The charge can be understood using the polarity property where cation is high polar (high conductive) anion is non polar (non conductive) and zwitter ion is medium polar. The molecule after interacting with the stationary phase, may get distorted based their chemical and thermal stabilities. The chemically labile constituents may get divided/fragmented if they are weakly bound. The hydrophilic and hydrophobic moieties of the single molecules may also get divided and elute at both extremes of the retention times. The same will happen for a molecule in the biological system, thus chromatographic separation pattern correlates to the behavior of the medicine in a biological system under healthy or diseased conditions.

When a molecule is moving over a stationary phase of a closed chromatographic system, it can move like a spherical band with out any fronting or tailing viz., one component of the molecule strongly interacts with the stationary phase. Instead of making the peak sharp by changing the analytical conditions the behavior can be used as a measure for the nature of the analyte molecule. The shape of the band moving on the surface will decide the shape of the peak/ peaks in a single, contour and 3-D chromatograms. This elution patterns also influence the data processing parameters for quantifying the area occupied by the data graph.

Organic or Organo metallic molecules having different types of charges will behave differently over different conditions of separations over a stationary phase influenced by specific polarity solvents. When a stationary phase like C18 with good number of theoretical plates and carbon loading is used for the elution of molecules of different polarity ions, driven by a mobile phase with varying polarity, all molecules in a mixture gets arranged one after the other, based on the hydrophilic and hydrophobic polarity interactions. The same can be implemented on a normal phase stationary phase,

but the interpretation gets reversed as the pattern of elution reverses in it from the reverse phase column.

The behaviors or the separation patterns and elution patterns get influenced due to the factors like pH, temperature of the column as the thermodynamic properties of the analyte, stationary phase and mobile phase vary. A molecule elutes faster under elevated temperatures due to influenced polarity and thermodynamic properties. The spectra of the molecules will also get influenced due to blue shift or red shift. Thus when a medicine is consumed, the body pH and temperature will influence its movement in the body and will not behave in the same manner in the persons of other pH and temperatures. All other factors, which influence the above properties, of the medicine and biological system, at the site of action can change the behavior of the medicine. Hence all these factors need to be standardized for assessing the therapeutic efficacy of the medicine.

When a common method of analysis was used for different mixtures of samples of food or drug, molecules having common polarity will elute at specific retention time. All medicines used for a particular disease or nutritional purposes were analyzed, they all will elute at the same retention time, if they have same polarity. By generalizing the elution pattern of different molecules in different samples one can come to a conclusion about the properties of molecules, which have same efficacy. From a database of analytical data created using specific analytical conditions, many generalizations were brought out regarding the chemical and therapeutic properties of different medicines. The efficacy of the constituent at a particular zone was understood based on the polarity and conjugative properties of the molecules indicated by the retention time and UV Visible spectrum of the constituents arranged in a specific order of polarity. After getting separated each of the ingredients enters in to the photo diode array detector.

The molecules were separated on a chromatographic phase using the polarity interactions of the analyte molecules, and mobile phase under the influence of pH, temperature and viscosity. A column having a specific polarity is used for analysis and the polarity of the mobile phase is varied constantly in the increased or decreased order, On a reverse phase column, the constituents present in the sample will elute in the same order, i.e., the high polar constituents will be eluted first, the medium polar constituents will elute next

followed by the low or non-polar constituents. The most preferred pattern is to change the polarity of the mobile phase either increased or decreased order of polarity such that no constituent of any polarity will be left un-eluted from the column thus achieving total elution. Thus controlling the polarity of the mobile phase will facilitate to bring a required influence on the polarity of the constituents to achieve separation of required order of elution. The order of elution of different polar molecules will depend on the order of elution with respective polar mobile phases.

The order and properties of polarity and elution in the case of normal phase columns are applicable same as in the case of reverse phase column but in reverse. In a normal phase column the non-polar constituents will elute first and followed by polar constituents, based on the order of polarity of the mobile phase used for elution.

The elution order of the molecules will be depending on the elution order of polarity interactions between column, molecules and mobile phase. Analysis on any kind of column where in the molecules are able to be arranged in a specific order of polarity using a variable mobile phase or a carrier with variable gradient of polarity will facilitate to execute this method.

The interaction of the polarity of the molecules being separated, the polarity of the stationary phase used and the polarity of the mobile phase used for the elution of the sample will control the elution pattern of the molecules. The resultant interaction of all the three and other related parameters like temperature etc., will decide the elution pattern and order of elution of the constituents based on their polarity. Thus in a medicine all the polar molecules will elute in first 'Zone 1' (Polar zone of the image), all the medium polar molecules will elute in 'Zone 2' (Medium polar zone of the image) and all the low polar or non polar molecules will elute in 'Zone 3' (Non polar zone of the image). When the molecules eluted in these three zones of many Chromatographic Fingerprints many generalizations were made regarding the chemical and therapeutic efficacy of the medicines. This is another basis of therapeutic standardization. We have reported in our earlier patent (PCT/IN/00123) about the division of the fingerprint on X and Y axis in to 9 different parts for the standardization of different samples, Figure 6. In the present improved method the division of the 3-Dimensional box has been presented with

quantitative levels at different analytical and biological conditions of the samples showing the absorbance properties of the constituents separated and analysed. The zones in a 3-D box were shown marked in the Figure 7. The radiation absorbed/emitted were presented on both axis. The polarity and energy being able to deal by the analyte molecule can be measured by suitable detectors.

Mostly the elutions of the samples were done from high polarity mobile phase to low polarity mobile phase. Thus in the finger prints the constituents present in the first zone (Zone-1) will be of high polar in nature on a reverse phase column and reverse to this on a normal phase column. The same pattern applies to the other zones, the medium polar constituents eluted in the medium polar zone (Zone -2) and the low or non-polar constituents eluted in the non-polar zone (Zone-3). This pattern reverses when a normal phase column is used due to its elution property as described above and the column and mobile phase conditions. Thus in the present elution also the elution of the constituents is controlled and driven in the required pattern by controlling the polarity of the mobile phase and the order of changing it in an orderly way using instrumental parameters.

If the analyte molecule is single, the ideal polarity will be the net of the polar and non-polar atoms present in it. When the same is kept in an ionic media, its polarity will be influenced. When the factors like temperature is changed it will be another value. At different temperatures it will have different values. Thus the polarity will change based on the influencing factors. When the same analyte is moving the influencing factors will be more. When it is moving over a charged surface its movement will be varying based on the total interactions between the sample, mobile phase and surface. If it is being moved by a mobile phase the movement will be further influenced. If the analyte is in a mixture the effects on the total polarity will be much different. Thus the retention of a molecule will depend on the other molecules present in the system.

When a molecule is surrounded by a group of molecules with different polarities the total polarity of the molecule will be different than when it is singly present. Thus the polarity of a molecule will vary when it is present in between a cluster of molecules having different polarities due to field effect. Even the separation pattern will change on a chromatographic media when a molecule is analyzed singly and in a mixture. Similar

mechanism happens in the human body when a molecule of food or drug enters in to the body.

The Detection.

Along with the charge of the molecules, it is the energy of the molecules; which is it able to deal, plays an important role in the therapeutic property of the medicine. So when all of the molecules eluted from a separation media are sent in to a photodiode array detector, the detector will provide a specific spectrum of the constituent amounting to the total quantum of energy it can deal with, based on its mass, structure and functional groups indicating its conjugative properties. But this is being a band spectra where it gets exposed to a multiple set of wavelengths, the molecules will absorb at different wavelengths on either side of the absorbance maxima. So this absorbance of the constituents at other wavelengths should also be taken in to consideration while assessing the properties of the analyte molecules. Because the molecules respond/absorb at either side of the wavelengths. It would have been a line spectrum if it gets exposed to only one wavelength of radiation. Based on the chromophores and structure, the spectrum will have one or more absorbance maxima. When all spectra of all molecules are arranged in a specific order of the polarity of the molecules arranged, the data is indicating the chemical and therapeutic property of the medicine as a whole.

When a specific set of energy system is varied in a biological system the chemical and biochemical interactions do alter. A specific mechanism of drug action could be due to a specific energy-containing molecule. When the molecule is functioning with its specific energy and exposed to another wavelength of radiation then, the activity get influenced and changed. Thus addition of unwanted energies will lead to unwanted chemical and biochemical mechanisms leading to diseased conditions.

A spectrophotometric and conductivity measurements were used for the detection of the eluted constituents from the column at specified temperature or pH . The data of each 3-D chromatogram is animated showing the variation of absorption property with temperature or pH.

The polarity and absorption properties of analyte molecules with known or measured individual mass over a wavelength range of electromagnetic radiation were

measured after separating over a chromatographic phase under different temperature and pH conditions.

The colors and the therapeutic efficacies of various medicines were given in the ancient literature. The colors of the molecules are due to a specific chemical nature of the molecule. The colors of the flames were used for the quality control of metals and related products, which involves the basic spectrophotometric principles. Thus study and understanding of the interaction of the electromagnetic radiation will be useful to study the chemical nature and thus the therapeutic efficacy of the medicines. The same principle has been used in the present spectrophotometric method of Chromatographic Fingerprinting and standardization. In other terms an existing concept has been presented in the form of a novel analytical method, removing the error of human factor. All the medicines for which Chroma %.

Step4: The Interpretation.

Thus arrangement of molecules in the specific order of polarity facilitating the assessment of the efficacy of the medicine in general and constituents in particular using any stationary phase and any mobile phase is the novelty of the method. The polarity of column, mobile phase and the constituents being separated will be controlled for such arranged and orderly elution. This facilitates the assessment of efficacy of any food or medicine. The details of the software are mentioned in our earlier patent.

The data thus provided by the analysis will give the information of conjugative (shown by the UV-VIS absorbance) and polarity properties of the individual constituents together along with polarity. The image is divided into three zones representing, Zone 1 (High polar zone or), Zone 2 (medium polar zone) and Zone 3 (low or non polar zone) scaled by retention times based on the elution pattern depending on the column used and the mobile phase. Reversing the analytical conditions can reverse the elution pattern.

The data generated was provided in the form of a database and generalizations, were achieved based on the similarities and dissimilarities of the image properties based on the classification of the properties of the absorptive properties as seen in the images. The basis of the interpretation of the Chromatographic Fingerprints is based on the division of the Chromatographic Fingerprints in to nine parts on X-axis, Y-axis and Z-axis. The 3-D

energy box was divided into 27 components due to variation of the energy at different temperatures. Different X, Y, Z coordinates values indicating the respective coordinates will be used for analyzing the image and interpret the data in traditional parameters and terminology.

Most of the high polar molecules will be highly reactive chemically, thus biologically. When they enter into the first part of the digestive system. Then the constituents will enter into the stomach and intestine where they will undergo different changes due to the digestive juices and their enzymes along with the influence of pathogens present in the digestive system. In the process of absorption the molecules of high activity (high polar) will immediately get absorbed by the biological system and show their therapeutic properties. This can be compared that in Ayurveda, the intestinal part of the human body is classified as PITTA zone, where the high polar molecules are playing a major role. The heat causing mechanism will play an important role in the diseases and biological mechanisms related to. It indirectly indicates the molecules of high reactive, the high polar molecules. All the constituents reported to have Agni (fire) property are eluting in this zone. The molecules of Astringent (Kashaya) are eluting in the first zone of the image.

In Ayurveda, the upper portion of the human body is defined as the KAPHA zone. Thus the molecules of medium polar molecules will play an important role in the mechanisms related to this zone. All the constituents reported to have Jala bhutas (water or liquid property like a Latex in plant and viscous constituents in blood etc.,) are eluting in this zone.

The low and non-polar constituents will be eluting in the last zone of the Chromatographic Fingerprint. Thus this zone (ZONE-3) is considered as VATA zone. Thus the basic humors of the molecules can be identified as per their polarity, which facilitates to know on what disorder (dosha) it is going to act upon. Thus the present method is useful for the therapeutic standardization of the medicines.

Thus the total constituents present in the Zone-1 Pitta zone, Zone-2 Kapha zone, Zone-3 Vata zone are present in the form of a PIE diagram which represents the ratio of the efficacy of the medicine on each of the disorder. Thus a medicine having constituents

in the order of 50:20:30 will be a medicines of TRIDOSHAHARA of the order of 50%: 20%: 30%. Thus the therapeutic efficacy is standardized quantitatively. The increase or decrease of any one or two of the other doshas can be done by formulating medicine by adding other medicines and prepare a suitable formulation needed to cure a specific individual. Most of the immunomodulatory molecules are also have the same polarity eluting at the retention times

Thus the data will be able to give the information, how it is going to act chemically and so therapeutically. When the individual constituents present in each zone and represented graphically or by any means of data presentation, the total constituents of the respective zone will give the percentage it is going to act on the particular DOSHA. Thus the data will explain how it (medicine) is going to act therapeutically on the VITIATION of each dosha collectively based on the qualitative and quantitative properties of the constituents present in the medicine. For example if the medicines has 30 % constituents in high polar zone(the pixel quantities of various colors like green, yellow, orange and red of a specific zone as quantities) 70 % in medium polar zone it can be represented as a medicine acts 30% on Pitta and 70% on kapha, as the colors represent different concentrations in the Chromatographic Fingerprints. Hence a medicine can be assessed as of Pitta- Kapha hara (30-70%). Thus the vitiation of doshas are quantified. This helps the doctor to under stand the efficacy of the medicines and decide his dosage. These features are as mentioned in our earlier patent.

It was reported in our earlier patent (PCT No IN/00123) that the properties like Rasa (taste), Guna (physical property), Veerya (potency), Vipaka (post assimilation state), and Prabhava (specific property), and many of the physicochemical properties as said in the Ayurveda and Siddha are based on chemical properties like polarity and conjugation of the chemical constituents and physical properties like viscosity, volatility etc.

Based on the polarity of the molecules eluted, the medicines are classified according to traditional system of therapeutic efficacy where in the polar compounds are found to be are acting on PITTA, the medium polar compounds are acting on KAPHA and the low or non polar compounds are acting on VATA. This is the basis of therapeutic standardization of the medicines. The polarity of the constituents is compared to a

continuous spectrum of radiation, where in the dosha is classified as acute to chronic of each dosha. The starting of the zone will be acute and the end of the zone will represent the chronic. Thus the compounds present in the said zone will act on the said intensity of the disease.

While observing the Chromatographic Fingerprints developed for medicines reported to have traditional properties it was observed that molecules absorbing towards UV region are dosha Hara (Decreasing) in nature and molecules absorbing beyond 300 to 800 are dosha Vridhi (Increasing) in nature. The Hara is decrease of a dosha and vridhi is increase or enhancement of the similar dosha. Even though the polarity is same the conjugative properties of the molecules are indicating the hara and vridhi properties.

The reactivity of any molecule will depend upon the number of double and triple bonds existing in the molecules along with the Electrophilic and Nucleophilic sites on the molecule. The moieties donating electron and accepting electron will create difference in the total electrical charge of the molecule. This makes the molecule polar. Hence polarity of the molecules will provide information about the capability of a molecule to donate or accept the electron with another molecule. This will control the activity of a molecule. Thus the information of the polarity of a molecule will speak about the reactivity of the molecule. In the present method the chromatogram provided by the method will give the conjugative and polarity properties of the constituents present in a medicine in the Chromatographic Fingerprint. Thus this method can be used for the standardization of the medicines to know the therapeutic efficacy of a medicine using their conjugative and polarity properties of the medicines. This is the novelty of the proposed method. Thus molecules with same or different conjugation are arranged in the order of polarity with different efficacy. The arrangement of molecules having different tastes indicates the same.

When all the medicines having physico chemical properties like taste were studied and grouped it was observed that all medicines having the properties are eluting in the decreasing order of polarity from Kashaya to Madhura. Hence it is understood that the order of polarity is understood in terms of taste in traditional philosophies. When the medicines with different colors having different efficacy were arranged in a group the medicines having red colour with astringent were classified as Pitta hara. When all

medicines having yellow color and Bitter taste were observed they were all eluting in the kapha zone of the image. When the medicines with black color were studied they were having constituents in all of the three zones of the medicines. When the leaf or fruit are tender they will have astringent in taste and red in color. When the Chromatographic Fingerprints of the tender leaves were observed it is seen that they have these properties. Every living thing will have a status of biotransformation of aging. The tender fruit will be astringent in taste in the beginning and it will be pungent, bitter, sour and sweet at its final stage. Fruits will become tasteless when they are over ripened. Thus this transformation is related to change of polarity of the chemical constituents in the living things. The interpretation of the images with chemical constituents is explained in different example figures.

This in turn is proportional to the therapeutic efficacy of the constituents in the chamber. Thus when a medicine is fingerprinted, based on the color represented for the absorption of a specific wavelength and having a specific polarity, the total colors and energy with molecular weight of the constituent/s in that zone is calculated and interpreted for the therapeutic efficacy of the constituents present in it. Thus the holistic therapeutic standardization and chemical standardization is achieved using this method.

For example the electron, neutron and proton are present in every atom. Positive and negative energies are present in every molecule due to which it has activity. Combinations of these different polarities in constituents in living and non-living things create activity in the system due to balance and imbalance in them.

If we observe this are explained in terms of Panchabhutas in the universe and living things. It is said that Agni (Fire) is related to Pitta property, Jala (Water, viscosity) is related to Kapha and Vayu (Air) is related to Vata property. The nature of the Panchabhutas is used to understand the prakrithi of the person. When it is observed the Panchabhutas is seen in every system of the universe. In an atom the proton, electron and neutron are the three polarities present. In a molecule there will be a combination of these properties due to which, based on the majority of any charge the action of the molecule depends.

When any molecule having these three properties are administered to a person or animal the three doshas in the body do respond. Based on the need the utilization of the energies will be done. The rest of the energies too will have their own impact on the other doshas. For example if the patient has a Pitta dosha which become excessive (Pitta vridhi) they he will be administered with a Pitta hara medicine. When a cationic molecule is added to the body first it will substantiate the required amount of the same property and what ever excess will hence forth will be bring a change in the equilibrium in the anionic and zwitter ionic moieties of the body. It is this reason when a medicine with Pitta Kapha hara medicines is added it will increase the vata. The same was explained in traditional texts. Hence addition of any ion will be influencing the equilibrium of the other two ionic systems or doshas in body.

Movie 1

The 3-D Energy Box:

The figure of 3-D energy box show a data graph generated for the same medicine analyzed under different analytical conditions like time, temperature, viscosity, and pH. It shows the change of polarity and thus the retention time, the spectrum influenced by bath chromic, hypsochromic, and hypo chromic and hyper chromic effects due to the same factors. Thus it will help to assess the efficacy of the medicine or a biological sample about its changes in the physico chemical properties due to the above factors. Thus an accurate standardization of the analyte samples will be possible.

The box is the container where in the matter is shown to be changing its properties. The deficient energy present in different molecules of all polarity groups is presented to be changing to sufficient and excessive levels of energy due to different influencing factors. Any extremes of this energy gained or lost will lead to an imbalance in the properties of the material. Thus fulfilling the deficiency and removing the excessive energy will be the methods of treatments to bring normalcy in the energy levels leading to a healthy condition. Thus maintaining harmony in all the three types of energies will bring a healthy condition. Some of the Treatment used in Indian System of medicines like yoga, meditation, and pranayama involves the same. They help in bringing harmony in the

variations in the energy levels, which were disturbed. Bringing back to normalcy will bring health.

The energy box is presented in the form of software, which presents the qualitative and quantitative chemical and therapeutic qualities of a medicine or diseased and healthy conditions in a biological system. Some of the Chromatographic Fingerprints of the samples of biological nature are presented.

Level 1 show the deficient energy level of the molecule or a biological system. Thus the biochemical pathways that could not happen due to deficiency of sufficient energy for the said mechanism will not be triggered.

Level 2 show that the sufficient levels of energy of the sample under test due to which a status of healthy condition will prevail leading to a healthy system.

Level 3 show the excessive levels of energy of molecules present in a medicine or a biological system. The removal of the excessive energy of the system will bring the normalcy in the energy system and thus the health is achieved.

For example if the system is exposed to varying states of energy then it becomes unstable. Irregular breathing, irregular eating habits, irregular day to day activities, temperatures fluctuating from very low to very high etc. Many of the epidemics erupt during the intermediate stages of seasons of cold and hot climatic temperatures, humid and non humid conditions etc,. Even the fluctuating the moods of the mind also will influence the health. Hence maintaining equilibrium in every state of life is essential. The flexibility property of the human being will give tolerance against these variations hence person who possess this property will be usually healthy and happy.

Hence maintaining healthy levels of energy will lead to healthy condition for which different molecules with energy absorbing, conditioning and donating properties will be useful. The behavior of a molecule under different conditions like temperature, pH, viscosity, ionic nature of the media in which the molecule is present can be understood.

The responsive (absorption/emission) property of molecules under experimental conditions at three different levels will indicate the qualitative and quantitative changes due to the influence of different conditions like pH, temperature, viscosity and ionic nature of the media where the reaction or activity is under going. It is this reason any medicine

will not behave 100% similar in different human beings. In a set of animals, which are maintained under experimental conditions, may have some commonality in the response. But practically in an uncontrolled conditions the same response cannot be observed. Hence the medicine tested in controlled conditions may differ in the day-to-day life of the humans in uncontrolled conditions. The study of the response of the chemical and biochemical reactions should be tested under practical conditions.

The polarity of a molecule is measured on the x-axis and the UV visible spectrum representing the conjugative properties are measured on Y-axis along with their quantitative properties on the z-axis. Thus in the 3-D box, a specific x, y and z coordinate indicates a specific quantum of energy able to be dealt by the molecule. Hence the energy of the molecule will be equivalent to the mass of the analyte sample having a specific charge (Polarity) and being able to deal a specific amount of energy equivalent to the radiation absorbed or emitted by the analyte matter. Thus the total energy dealt by the whole sample will be $E=mc^2$ where in the energy is the total energy of all the analytes present in the sample and the total white light (having all ranges of radiations). But a molecule absorbing at only specific wavelength cannot have the energy of a different molecule absorbing at a different wavelength. Hence the specific quantum of energy possessed by the sample will depend on the specific wavelength dealt by the molecule. Because, no matter will be active when it is neutral, particularly a medicine with many molecules. When the frequency and wavelength is different for different radiations the radiations what we see at a particular time have not started at the same time from the source. Hence time plays a very important role in every aspect including the activity of a medicine for a person. Thus this method facilitates standardization of matter and radiation for the assessment of the quantum energy they contain and arrange the matter in an order based on their physico chemical properties and kinetics for quantum chemical studies by using an equation $E=m^{+p} C^\lambda$ Where in m is the mass, p is polarity of the analyte material at specific temperature, pH, pressure influenced by the ionic nature of the media in which it is present along with the viscosity and C is the speed of the respective radiation.

In the animated figure the same is shown. The radiations when moved with respect to time the quantum of energy will not be the same. Similarly a molecule having a particular quantum of energy will vary in its energy when it is exposed to different temperatures, pH and Ionic media and give different results from person to person and place to place, so on. Even though the medicine is consumed at single time various constituents in it will be moving in different speeds due to their interaction with the surface on it is moving, like a set of molecules get separated over a chromatographic surface. It is the final quantum of energy being able to be measured which actually brings a change in the chemical atmosphere. Thus measurement of the energy dealt by a molecule along with its electrical charge will help to understand the chemical and therapeutic property of the sample under test.

Step 5: The Applications

When the Chromatographic Fingerprints of different medicines, developed using the proposed method are studied some generalizations were observed about the therapeutic efficacies of the medicines. The same efficacy was reported in the traditional literature also i.e. the experimental and reported results are equal. Hence the method was validated by studying different medicines, having different therapeutic efficacies.

The Chromatographic Fingerprints generated are analyzed for their chemical and therapeutic properties. The basic features in a Chromatographic Fingerprint are found to be 1.The "zone of the polarity in which the constituents have eluted. 2.The conjugative properties of the individual constituents present. 3.The total quantity of energy able to be absorbed by the molecule.

As described in the traditional standardization methods the colors of the medicines were standardized based on their colors and their therapeutic efficacy. It applies even in the case of any molecules. The structure, functional groups, conjugation, and the extent of unsaturation will influence the wavelength of absorption (absorbance maxima) of the molecule which is intern interpreted against the efficacy of the medicine. The more the molecule is conjugated the longer the wavelength of absorption will be. Hence the UV-VIS

absorbance of any molecule is widely used in the qualitative and quantitative properties of the constituents.

For example if the samples are analyzed at three different temperature ranges like 22-27 ° C, 27-32 ° C, 32-37 ° C, 37-42 ° C the polarity of the stationary phase, mobile phase and analyte will change. Thus the inter action will also change during the separation process. This can be correlated to the similar behavior in human being also when the drug action of molecules will change under different physico chemical conditions like temperature, viscosity, pH and ionic media existing in the body. A mixture of sample having a mixture of constituents with very little difference of polarity could not be separated at higher temperatures. But at lower temperatures it can be achieved. Thus any parameter, which can influence the polarity of the three-component system (Separation media-Mobile phase-molecule), will be able to control the physico chemical properties of the analyte. Even the absorbance will be changing to any type of effects like bathochromic, hypsochromic shift etc.,. The similar behavior will occur when the body temperature or pH is changing due to different external and internal factors. The movement of the drug molecules will be influenced by the said factors due to which the drug action will change. Here the body matter over which the molecule is moving is compared to the stationary phase of the column. The polarity of the body, molecule and the factors will influence the energy of the molecule, which in turn will change the chemical and therapeutic behavior of the molecule. Thus due to the difference in the environment in different human beings the efficacy will vary.

Different examples of Chromatographic Fingerprints of various medicines of different philosophies were given in Figures 10-129. The description of the figures is given below.

Thus in the present method of analysis, a mixture having different constituents was separated in to individual molecules/molecular fractions using a suitable analytical method, stationary and mobile phase conditions. When each of the molecules is exposed to a set of electromagnetic radiations of different wavelengths, specific spectra are generated. The spectra of all molecules eluted at different retentions become a 3-D chromatogram showing retention time on x-axis, spectra on y-axis and absorbance on z-axis. When the 3-D

chromatogram is presented in a bird's eye view at different levels, different contour chromatograms can be presented as data graphs.

This pattern of molecular absorption properties for the molecules arranged in a specific order of polarity along with their spectra become a pattern of the figure like a fingerprint. As it was developed using a chromatograph it has been termed as chromatographic fingerprint, which was termed with a specific trademark. Only a pattern of fingerprints which can give an identification of the analyte can only be called as fingerprint, otherwise it become a pattern of line with out any meaning. Usually a human fingerprinting software will be able to give any confirmation of the identity of the source of the image based on the data base of such images already generated for a large group of persons, by searching for similar with out which it cannot infer any thing. In the present method, the division of fingerprint in to 9 different therapeutic zones helps to understand the probable efficacy of the medicine under study. Thus it works independently for the assessment of the efficacy of any sample understudy with out a referral standard. Based on the deranged polarity and energy in the patient, the suitable medicine, which can balance the derrangement by polarity and energy, have been selected and used. The Tridoshas were found to have the basis of polarity. The constituents having these properties will bring disease and health in man and medicines. Thus the bases of Tridoshas in a disease and drug have been understood using the present method.

As it was developed using a chromatograph it has been termed as chromatographic fingerprint, which was termed with a specific trademark. A pattern of lines in a fingerprint which can give an identification of the source can only be called as fingerprint, otherwise it become a pattern of lines with out any meaning.

If a database of fingerprints developed having known about the data and commonality relating to a specific factor like efficacy or property then it helps to build a method as prescribed in the present invention. Usually a human fingerprinting software will be able to give any confirmation of the identity of the source of the image based on the data base of such images already generated for a large group of persons, by searching for similar with out which it cannot infer any thing. But in the present method the divisions of fingerprint in to 9 different therapeutic zones help to understand the probable efficacy of

the medicine under study. Thus the present method works independently for the assessment of the efficacy of any sample under study.

Thus many of the behaviors of the molecules in a chromatographic column are correlated to the behavior of the molecules in the biological system. The food/ medicines also undergo different changes due to different chemical and biochemical conditions. Based on the pH and temperatures and other influencing factors also, alter the properties of the molecules in due course of time of their stay in the biological system, the medicinal molecules will do different actions. Thus when a high polar molecule enters in to a non-polar biological system some of the polarity will get adjusted and the behavior of the medicine differ from its action from out side the body. Same behavior can be seen due to factors like temperature of the medicine and body. Thus one should be able to assess the efficacy of the medicine at the site of action by simulation of the similar conditions prevail in the biological system. The time of extraction and conditions of extraction also influence the nature of the constituents and their help to assess the therapeutic efficacy of the medicines.

After analysis of the medicines, the healthy and disease profiles of different human blood samples were studied. They have showed what a disease profile is and the role of polarity in a disease pattern and drug pattern was understood. This facilitates to assess the disease profile and the constituents of specific polarity deranged and select suitable medicines for the said disease. The disease identification, drug selection, drug targeting and drug monitoring was made possible by using this method. When the blood samples of the humans were analyzed, based on the deranged polarity in the patient, the suitable medicine, which can balance the derangements, can be selected and used. Selection of suitable medicines for a patient, suffering with a specific disease needs understanding of all properties of all factors influencing or involved in the disease pathogenesis. The environment in which the patient living should also be taken into consideration with out which the treatment will be not be successful.

Thus having a method of assessing the disease, suitable medicines and apply on a suitable patient who is suffering with a specific disease needs the total understanding of the properties of all factors influencing or involved in the disease pathogenesis. But the

environment in which the patient living should also be taken into consideration with out which the treatment will be unsuccessful.

Based on the deranged polarity in the patient the suitable medicine, which can balance the derrangement, have been selected and used. The Tridoshas were found to have the basis of polarity. The constituents having these properties will bring disease and health in man and medicines. Thus the basis of Tridoshas has been understood using the present method.

After working on different diseases and medicines used for, it was observed that most of the medicines capable of absorbing the ultraviolet radiations are capable of decreasing the disease. The presence of Ultra violet radiations in the body are leading to all diseases by derrangement of biochemical and bio physical properties of the living beings. Hence increase of ultraviolet radiations is the causative factors for almost all diseases. But what is the source of these radiations in the human body deranging all components and the Gene is a million dollar question?

Thus it is understood that when the radiations of other side are decreased like the blood or mitochondria which are related to pitta got deranged, the radiations of the ultraviolet radiations dominate their effect leading to derrangement of biochemical and bio physical properties of the living beings. This correlates to the traditional concept of maintaining the BALANCE of TRI DOSHAS leads to health. This also supports the traditional concept of the body is able to be healthy on its own by this balance of tridoshas. What we need to do is to provide the required material and hygienic conditions. So body can drive on its own, we need only to fuel it and clean it.

The separation, measurement of the absorbed/transmitted electromagnetic radiation by their individual constituents present at various conditions of temperature, pH and ionic media has helped to assess the chemical, biological and therapeutic properties of the material under test using the above method.

We claim:

1.A method for detection and identification of constituents of extracts of plants or animal, natural or synthetic sources possessing medicinal value and capable of responding (absorb or emit) to Electro Magnetic of radiation using chromatographic finger printing where in the said method comprising the steps of:

- (i) extracting Organic, Organo-metallic and metallic atoms or molecules using suitable solvent.
- (ii) subjecting the extract obtained in step (i) to the separation analysis based on pH, polarity under the influence of physical properties like temperature, viscosity and ionic media using a Chromatography technique under experimental conditions.
- (iii) generating Contour and 3-D data graphs of the ingredients eluted based on conjugative and polarity properties qualitatively and quantitatively.
- (iv) converting the, data thus obtained from step 'iii' in to a data image and analyzing the colored image based on the selection of various properties like polarity, mass and colors denoting the concentrations of the various constituents eluted with time having a specific energy detected on a detector which can measure the energy absorbed or emitted.
- (v) generating a chromatogram based on the data and color analyzed, having different polarities at various retention times along with different physico chemical properties like conjugative and polarity properties of the analyte constituents eluted with time at different pH and temperatures.
- (vi) generating data in the form of a 2-D and 3-D forms and divided in to different zones representing a specific energy and related to efficacy of the medicine, the division of the image is based on the polarity indicated on X axis and energy absorbed/emitted from an electromagnetic radiation interacted with matter under test indicated on Y-axis, where in the X and Y-axis are divided in to three zones based on polarity. The Z-axis represents quantity of Absorbance or emission at a specific condition.
- (vii) identifying the compounds in the said molecules by the absorptive and emission properties of various constituents in the image related to a specific efficacy due to its action on a specific single or multiple pathways.
- (viii) identifying, determining and classifying the constituents by the absorptive or emission of an electromagnetic, electrical or magnetic energy of the eluted constituents based on physico chemical properties like polar, medium polar and,

less or non-polar properties and conjugation for chemical and therapeutic standardization of the sample analyzed.

(ix) generating a barcode for the data using the X, Y, Z and time coordinate properties of the data.

(x) generating a database of Chromatographic Fingerprints and barcodes and identifying the respective compounds of extract.

(xi) generating a database of Chromatographic Fingerprints and barcodes and identifying the respective compounds of the extract.

2. A method is claimed as claimed in claim 1, where in the HPLC apparatus used may be selected from any commercially available HPLC apparatus with the Photo Diode Array detector, preferably with a gradient, ternary or quaternary system of pumps.
3. A method is claimed as claimed in claim 1, where in the HPLC apparatus used may be selected from any commercially available HPLC apparatus with the Photo Diode Array detector, and any other detector which can measure the properties like Polarity, structure and Conjugation where in, the system preferably containing with a gradient, ternary or quaternary system of pumps.
4. A method as claimed in claim 1, where in on analysis of 3-D and contour chromatograms using new software called Herboprint (In the earlier the name was given as Rain bow but the Herboprint has been protected by trademark) that gives a chromatogram and barcode with retention time, wavelength and Absorbance on its X, Y and Z - axis.
5. A method as claimed in claim 1, where in on analysis of 3-D and contour chromatograms using new software which gives a data having indicated the (vitiation) of doshas quantitatively in percentage ratio.
6. A method as claimed in claim 1, where in a single solvent Ethanol or aqueous Ethanol is used for extraction of the constituents; same analytical conditions and instrumental parameters were used for all samples to bring the therapeutic generalizations there by achieving the therapeutic standardization.
7. A method as claimed in claim 1, wherein, in step (iv) provides an in built software provides chemical analysis of the constituents present in the medicine under study and their conjugative and polarity properties indicating the therapeutic efficacy of the medicine as per the traditional concepts of the medicine using the new software developed.

8. A method as claimed in claim 1, wherein in step (iv) an inbuilt software provides a novel concept of chromatographic finger printing of herbal medicines that will be useful for the quick identification of the actual profile of the compounds present in the medicine under use along with their therapeutic efficacy of the constituents.
9. A method as claimed in claim 1, wherein the atoms/ molecules are separated using a chromatographic method of separation and arranged in the specific order of polarity along with conjugative property measuring the absorptive and emission property of an electromagnetic radiation by the analytes.
10. A method called Herboprint for detection and identification of extracts of plant or animal origin, natural or synthetic sources possessing medicinal values obtained as claimed in claim 1 with following features:
 - a. a soft ware capable of analyzing (extracting colors) the colored contour and 3-D chromatographic image based on various colors with respect to a specific energy as presented in the energy box. The box denoting the concentrations and energies of various constituents eluted with time having arranged in a specific order of polarity indicated as retention time.
 - b. a soft ware capable of analyzing the developed chromatograms (energy systems) of the medicine using all its 3 dimensional properties of the image.
 - c. a soft ware capable of generating a new chromatogram and energy box having peaks at various retention times along with conjugative properties of the molecules eluted with time in a specified order of polarity
 - d. a soft ware capable of identifying the chemical and therapeutic properties of the constituents in the said materials (natural or synthetic) by the absorptive or emission properties of various constituents in the image.
 - e. a soft ware capable of correlating the reported biological, therapeutic activity of the constituents present in the medicines understudy based on the polarity and the conjugative properties of the molecules represented in the form of energy, by dividing the Chromatographic Fingerprint into therapeutic zones on X, Y and Z axis.
 - f. a soft ware capable of generating a barcode for a selected peak(s) with a specific energy using the image coordinates viz, X for retention time, Y for wavelength, Z for absorbance units, R for number of red pixels, G for number of green pixels and B for number of blue pixels, provided by the proposed software.
 - g. a soft ware capable of generating a database of Chromatographic Fingerprints and barcodes for the samples, facilitating all kinds of database utilities like Enterprise Resource Planning (ERP) and Customer Resource Management (CRM) applications.

- h. a software capable of generating a database of the 'display widows' having specified label specifications for all the samples to be used by the ENTERPRISE RESOURCE PLANNING (ERP) and CUSTOMER RELATIONSHIP MANAGEMENT (CRM) type of business applications.
11. A method as claimed in claim 1, wherein, in step (iv) an inbuilt software provides a novel chromatographic finger printing of herbal medicines and formulations analyzed and are developed on a electromagnetic radiation detector like Photo Diode array Detector (PDA) connected to a chromatographic instrument like High Pressure Liquid Chromatograph, which delineates the data of the spectral properties of the constituents present in the material having the medicinal value, presented in a specific order of physico chemical properties like polarity along with conjugation generated under similar experimental analytical conditions.
12. A method as claimed in claim 10 is used as a data processor of 3 D chromatograms and color contour image of an ingredient, said processor comprising computing means and;
- i) an analyzer (extracting colors) for analyzing the colored contour image based on the selection of various colors (with standards mentioned in release notes, life cycle, processing) denoting the concentrations of the various constituents eluted with time, and polarity based on retention time;
 - ii) an analyzer for analyzing the 3-D chromatograms of the medicinal extract using all its 3 dimensional properties of the image;
 - iii) a means for generating a chromatogram having peaks at various retention times along with conjugative properties of the compounds eluted with time in a specified order of polarity;
 - iv) an identifier for identifying the compounds in the said extract by the electromagnetic radiation most preferably Ultra Violet and Visible range, absorptive properties of the various eluted constituents in the image;
 - v) a means for correlating the Chemical, biological, bio chemical, bio physical and therapeutic activity of the of various eluted constituents present in the medicinal sample _understudy based on the polarity and the conjugative properties of the molecules by dividing the Chromatographic Fingerprint into therapeutic zones on X and Y axis indicated by the coordinates of the pixels equivalent to scale of retention time;

- vi) a means for generating a barcode for a selected peak(s) using the image coordinates viz., X for retention time, Y for wavelength, R for number of red pixels, G for number of green pixels and B for number of blue pixels, provided by the proposed software;
 - vii) a means for generating a database of Chromatographic Fingerprints and barcodes for the samples, facilitating all kinds of database utilities like Enterprise Resource Planning (ERP) and Customer Resource Management (CRM) applications; and
 - viii) a means for generating a database of the 'display widows' for all the samples to be used by the ENTERPRISE RESOURCE PLANNING (ERP) and CUSTOMER RELATIONSHIP MANAGEMENT (CRM) type of business applications
13. A method as claimed in claim 12, where in solvents used for extraction are selected based on the polarity, hydrophilic and hydrophobic nature of the constituents of the sample under study.
14. A method as claimed in claim 12, wherein the HPLC apparatus used is selected from any commercially available HPLC apparatus with the Photo Diode Array detector, preferably with a gradient or ternary system of pumps.
15. A method as claimed in claim 12 wherein, the polarity of the mobile phase of a non-aqueous and an aqueous solvent of a specific pH is controlled by varying the ratio of the mobile phase from 0% to 100% of an aqueous solvents like water or a buffer of a known pH, along with a non-aqueous solvent or vice-versa.
16. A method as claimed in claim 12 wherein, on analysis of 3-D and contour chromatograms using new software entitled " Herboprint " that gives a chromatogram with retention time and wavelength on its X and Y-axis.
17. A method as claimed in claim 12 wherein, on analysis of 3-D and contour chromatograms using new software, which gives a data having indicated the vitiation of doshas quantitatively in percentage ratio.
18. A method as claimed in claim 12 wherein, a single solvent ethanol is used for extraction of the constituents; same analytical conditions and instrumental parameters

were used for all samples to bring the therapeutic generalizations to achieve the therapeutic standardization.

19. A method as claimed in claim 12, wherein the software Herboprint is having following features:

- (a) a software with a facility of opening chromatographic fingerprint images in different Formats (extensions) like .BMP, JPEG, TIF, GIF from the file folders and analyze it for different colors present in the image with single pixel sensitivity;
- (b) a software with a facility of display of the pixel information in the form of 1.a graph having a scale of X (0-(min. time scale) and Y (200-800nm) coordinates and 2. a Pie diagram with individual values of each peak (Automatic and Manual) in two separate columns beside the graph;
- (c) software with a facility of printing all the data generated after analysis using PRINT Icon;
- (d) a software with a facility of changing the page setup for printing using PAGE SETUP Icon;
- (e) a software with a facility of selecting a part of the image and analyze using RESIZE Icon;
- (f) a software with a facility of opening any number of image analysis windows for different images, and display of status in WINDOW icon;
- (g) a software with a facility of dividing the image in to three Zones at 20 min interval, using ZONE icon;
- (h) a software with a facility of inverting the selected image using INVERT icon;
- (i) a software with a facility of switching over to Notepad, Word pad and MS Word, using EDITOR icon;
- (j) a software with a facility of operational information about various features of the Software using, the HELP icon; and
- (k) Software with a facility of saving the data generated using SAVE AS icon as JPEG file format.

20. A method as claimed in claim 1, wherein the method is used to assess the healthy or diseased patterns of a human being, animal or a microorganism which helps for different purposes of disease identification, drug selection, drug targeting and drug monitoring.
21. A method as claimed in claim 1, wherein the atoms/ molecules are separated and arranged in the specific order of polarity along with conjugative property measuring the absorptive and emission property of an electromagnetic radiation by the analytes.
22. A method as claimed in claim 1, wherein the 3-D box is the container of the three energies where in the constituents of different properties will be having the polarity as shown in the table of interpretation guidelines.
23. A method as claimed in claim 1, wherein the 3-D box is the container of the three types of molecules with specific energies where in, the constituents with known properties of the molecular structure, polarity and conjugation will be indicating the therapeutic efficacy of the constituents and the medicines.
24. A method as claimed in claim 1, wherein the molecules are eluted in a specific order of polarity with a range of conjugative property using detectors with measurement of emission and absorption of a electromagnetic radiation, conductivity, molecular structure is useful for the chemical and therapeutic standardization.
25. A method as claimed in claim 1, wherein the molecules are arranged in a specific order of physico chemical properties for chemical and therapeutic standardization.
26. A method as claimed in claim 1, wherein the molecules in a sample matrix are separated by means of a chromatographic technique and arrange in a specific order of polarity for chemical and therapeutic standardization based on the polarity and conjugation properties.
27. A method as claimed in claim 1, wherein the method is capable of analyzing a sample at different electromagnetic radiations, polarity, viscosity and temperature using suitable pumps to pump the liquids of mobile phase, having a detector which can measure the absorption or emission properties of analyte samples in a selected range of wavelength, having a software generating analysis data after coordination and compilation of signals from different types of detectors and analyzing the data for chemical and therapeutic standardization, generating barcode for the data generated after analysis and finally arranging the data in specific data base folders.
28. A method as claimed in claim 1, wherein the method capable of Chromatographic Fingerprinting where in the physico chemical properties of the carrier are varied for eluting the molecules of a sample matrix to be separated on a chromatographic

separation media of a planar or closed chromatographic system for chemical and therapeutic standardization.

29. A method as claimed in claim 1, wherein the method capable of Chromatographic Fingerprinting where in the analytes after separated on a chromatographic system under different conditions of temperature, pH and viscosity and detected with detectors able to detect the mass, fragmentation pattern, conductivity, polarity, refraction, reflection, diffraction, absorptive and emissive properties of the analytes over a range of electromagnetic radiation for chemical and therapeutic standardization of natural, biological and synthetic materials and medicines.
30. A method as claimed in claim 1, wherein the detection system arrays the results of interaction of radiation with matter for the molecules arranged in a specific order of polarity and results in interpretation of the chemical and therapeutic properties of analyte sample.
31. A method as claimed in claim 1, where in the Chemical and therapeutic standardization is assessed for a material using the absorbance, emission of the molecules at a specific single or multiple wavelengths of radiation energy ranges to which the matter is exposed.
32. A method as claimed in claim 1, wherein the data generated due to the separation of analytes over a separation media leading to chemical and therapeutic standardization of the analytes under test.
33. A method as claimed in claim 1, wherein the chemical and therapeutic standardization is based on the pattern of the energy data graphs generated due to the inter action of radiation with matter in a detection system to which the matter is exposed to.
34. A method as claimed in claim 1, wherein assessment of the efficacy of a medicine and a diseases pattern/status of a living being for disease identification, drug identification, drug targeting, drug selection, drug monitoring and drug inter action with biological systems
35. A method as claimed in claimed in claim 1, where in the solvents of different polarities are used for extraction based on the hydrophilic and hydrophobic nature of the sample and the constituents under study, generally ethyl alcohol is used as solvent for preparation and standardization of medicines.
36. A method claimed in claim 1, where in the Chromatographic Fingerprints can be developed for a same medicine extracted under different pH, polarity, viscosity and temperature values.

37. A method as claimed in claim 1, said method is carried out using standard analytical parameters like extraction with ethyl alcohol, maintaining a regular run time although the analysis of samples, eluting with a mobile phase of acetonitrile and phosphate buffer having a pH range of 3-9, electromagnetic radiation range of 200-800nm or below or beyond using a capable detector, maintaining column, total flow line and detector in the temperature range of 20-60° C, a mobile phase conductivity range of 0 to 50 X 10³ mhos.
38. A method as claimed in claim 1, wherein the non-aqueous, organic and aqueous, water or buffer used in step 1(iii) under specified pH, viscosity and temperature are selected based on the range of pH, viscosity, temperature and polarity required.
39. A method is claimed as claimed in claim 1, wherein converting the data into a colored image or an analyzable data comprising the conjugative and polarity properties along with quantitative data of the constituents of the medicine under study.
40. A method is claimed as claimed in claim 1, where in the therapeutic efficacy of a medicine (Single or formulated) is assessed using the quality of the constituents present in a particular polarity and radiation absorptive or emission X,Y,Z coordinate points in any of zone of the Chromatographic Fingerprint.
41. A method is claimed in claim 1, where in the software generates a bar code for the properties of the images like a selected peak or peaks or whole image or movie using the X(Retention Time), Y (Wavelength), Z (Absorbance, In case of 3-D image and movie file like Avi, Mpeg etc), R(Number Of Red Pixels), G (Number Of Green Pixels And B (Number Of Blue Pixels) coordinates, provided by the software, which makes the product propriety for an industry.
42. A method as claimed in claim 1, where in the solvents used for extraction is selected based on the polarity, hydrophilic and hydrophobic nature of the constituents, sample and its constituents under study.
43. A method as claimed in claim 1, where in the polarity of the mobile phase of a non-aqueous and an aqueous solvent of a specific pH, is controlled by varying the ratio of the mobile phase from 0% to 100% and vice-versa of an non aqueous solvents like acetonitrile, methanol aqueous solvent like phosphate buffer.
44. A method as claimed in claim 1, wherein computational method of chromatographic finger printing, chemical and therapeutic standardization and bar coding of Organic, Organo-metallic and metallic atoms or molecules from a plant, animal, a naturally available or man-made materials used as medicines said method comprising
- a. selecting plant animal or a naturally available or man made materials which possesses medicinal value, and extracting the constituents,

- b. separating the constituents into individual compounds, generating and converting the 3-D and contour chromatograms into Chromatographic Fingerprints,
 - c. analyzing the Chromatographic Fingerprints using the software developed, and
 - d. interpreting the data.
45. A method as claimed in claim 1, wherein the detector provides absorption/emission spectra of the compounds having displayed the conjugative and polarity properties of the molecules and the concentration of the individual concentrations of the molecules along with the polarity of the molecules.
46. A method as claimed in claim 1, wherein the chemical and therapeutic standardization is achieved by interaction of matter to different individual electromagnetic radiations.
47. A method as claimed in claim 1, wherein in step (vii) "The Chromatographic Fingerprint" (Herboprint) becomes a blue print of the constituents present in an herbal medicine or formulation for an assay and quick identification of the medicine understudy.
48. A method as claimed in claim 1, wherein, same standard analytical parameters like Extraction with same solvent Ethyl alcohol, same run time, same mobile phase acetonitrile along with phosphate buffer in a specific pH in the range of 3-9, same conductivity range of $0-50 \times 10^3$ mhos and a same range of Electro Magnetic radiation from 200nm – 800nm is used for Chromatographic Fingerprinting and chemical and therapeutic standardization along with subjecting the samples to different variable analytical factors like pH, temperature, column length, run time and Polarity of the stationary phase and mobile phase and maintaining the same order of arrangement of the molecules based on polarity, and molecular size in the specific order, is the basis of the assessment of chemical and therapeutic quality of the samples under study.
49. A method as claimed in claim 1, wherein the measurement of absorbance energy is indicating the activity of a constituent in absorbing the respective quantum of energy at a specific X, Y, Z position of the energy system with specific polarity and conjugative properties from the diseased conditions making to cure the disease pattern and hence therapeutically indicative.
50. A method as claimed in claim 1, wherein the respective zones and X, Y, Z coordinates of the constituents have a specific property of chemical and therapeutic efficacy of the analyte constituents present in a medicine.

51. A method as claimed in claim 1, wherein influence of variable factors like temperature, pressure, pH and viscosity of the mobile phase, stationary phase and sample will be influenced to arrange the atoms and molecules in a specific order of polarity whose conjugation and molecular structure will be analyzed along with conductivity will be useful for the chemical and therapeutic standardization.
52. A method as claimed in claim 1, wherein the gradient, ternary or quaternary run of the mobile phase ends at the ratio where it starts.
53. A method as claimed in claim 1, wherein the interpretation of the activity of the analyte atom or molecules and their energies having a specific quantum of energy along with structural properties relates to their chemical and bio chemical and biophysical activities.
54. A method as claimed in claim 1, wherein the interaction of molecules of different polarities is assessed when they are arranged in the order of polarity.
55. A method as claimed in claim 1, where in the temperature, pH and polarity of the mobile phase is controlled by varying the temperature, the ratio of the mobile phase of a solvent between 0 to 100% of an aqueous solvent like Water or a phosphate buffer at a required pH by using suitable buffer to maintain the required pH, polarity and ending at the ratio where it started with a non-aqueous solvent by a gradient, ternary or quaternary run.
56. A method as claimed in claim 1, wherein the non-aqueous, organic and aqueous, water or buffer at a known temperature, viscosity and pH are solvents used in step 1(iii) and are selected based on the range of temperature, viscosity pH and polarity required.
57. A method as claimed in claim 1, wherein, same standard analytical parameters like Extraction, run time, mobile phase, range of Electro Magnetic radiation influenced by variable factors like pH, temperature, column length, run time, Polarity of the column, stationary phase and mobile phase, maintaining the same order of arrangement of the molecules based on polarity and molecular size in the specified order are used to achieve chemical and therapeutic standardization.
58. A method as claimed in claim 1, for chemical and therapeutic standardization based on the pattern of the energy data graphs generated due to the inter action of radiation with matter in a detection system to which the matter is exposed to, after an orderly separation.
59. A method as claimed in claim 1, a bio informatics tool to assess the efficacy of a medicine and a diseases pattern/status of a living being for disease identification.

drug identification, drug targeting, drug selection, drug monitoring and drug interaction with biological systems

60. A method as claimed in claim 1, wherein use of Chromatographic Fingerprints of contour and 3 -D chromatograms of the constituents as claimed in any of the proceeding claims are the basis for identification of chemical constituents for chemical and therapeutic standardization.
61. A method as claimed in claim 24, wherein the method enables to understand and standardize the variations in Physico-Chemical properties of the medicines in the form of energy variations, different states of Three energies. These variations are present in medicine and living beings used for the therapeutic standardization using conjugative and polarity properties of the medicines shown in chromatographic fingerprints.
62. A method as claimed in claim 1, wherein effect of variable factors like temperature, humidity, viscosity, ionic nature etc. is observed on the physico chemical properties and thus therapeutic efficacy of a medicine can be assessed using the 3-D energy box.
63. A method as claimed in claim 1, wherein in step (ix), preparation of a database of a large number of samples will give many generalizations of the therapeutic efficacy of a particular group of plants or animals classified as a group for a particular disease for therapeutic identification, classification, standardization and monitoring.
64. A method as claimed in claim 1, wherein the atoms/ molecules are separated using a chromatographic method of separation and arranged in the specific order of polarity using a separation technique where in the variable parameters like polarity, pH, temperature, ionic and electrical charge and viscosity of the reaction media, mobile phase, stationary phase and sample under analysis which will be varied leading to the interpretation of the Tridosha properties and efficacy of the same.
65. A method as claimed in claim 1, wherein the absorption and emission of the electromagnetic radiation by analyte constituents in a medicine along with polarity property will help to understand the efficacy of the same and the efficacy is due to these two basic properties.
66. A method as claimed in claim 1, wherein the 3-D box is the container of the three energies where in the constituents of Agni in nature or in the first zone of the Chromatographic Fingerprint, Jala property in the second zone of the Chromatographic Fingerprinting and Prithvi in the last zone. The Vayu is present in the last zone and in the area where in there in no constituents were present in the entire container.
67. A method as claimed in claim 1, wherein the chemical profile in diseased and healthy blood samples can be studied in a microorganism, animal and human being to correlate

the disease profile with chemical profile indicating the relation of polarity and conjugation for drug selection, drug identification, drug targeting and drug monitoring.

68. A method as claimed in claim 1, wherein the energy at different doshas at deficient, sufficient and excessive states of levels indicating the energy variations of natural microorganism, animal and human being along with medicines and synthetic materials.
69. A method as claimed in claim 1, wherein using the method enables therapeutic grouping of constituents and medicines can be done based on the said atomic and molecular properties.
70. A method as claimed in claim 1, is useful for the assay of the taste and its order, color of transmission and absorption and odor will be done at different levels of energy variations to understand the process of biotransformation and biogenesis.
71. A method as claimed in claim 1, wherein the traditional properties mentioned in the basic concepts mentioned in the traditional philosophies were correlated to the physico chemical properties of the medicines.
72. A method as claimed in claim 1, wherein the physico chemical properties like polarity of the atoms and molecules are useful to identify the bio chemical pathways having the same properties involving a specific energy.
73. A method as claimed in claim 1, wherein the method is useful for understanding the evolution of the dosha and dhatu properties of the medicines in living and non-living things.
74. A method as claimed in claim 1, wherein chromatographic fingerprint of the native medicines of a particular place or country to develop suitable traditional philosophies and dictionaries for the chemical and therapeutic standardization.
75. A method as claimed in claim 1, wherein chromatographic fingerprint of the blood samples of living beings of a particular place or country to develop suitable traditional philosophies and dictionaries for the chemical and therapeutic standardization.
76. A method as claimed in claim 1, wherein the method enables to understand and standardize the variations in Physico-Chemical properties of the medicines in the form of energy variations of different states of Tri dosha energies present in medicine and living beings, for chemical, clinical and therapeutic standardization.
77. A method as claimed in claim 1, where in the Chemical and therapeutic standardization is assessed for a material using the absorbance, emission, reflection, interference, refraction and diffraction of the molecules at a specific single or multiple wavelengths

- range to which the matter is exposed and the data is interpreted for single and multiples of wavelengths in a fingerprint.
78. A method as claimed in claim 1, wherein the chromatographic fingerprint is used for creation, improving, altering and modifying the capability of hard wares and soft wares useful for drug discovery by molecular modeling applications.
 79. A method as claimed in claim 1, wherein the arrangement of molecules in a specific order of physico chemical properties after separation on a separation media for chemical and therapeutic standardization with and with out recycling the eluent molecules either in to the same column or in to a battery of separation systems.
 80. A thermally protected and controlled system containing the separation media of stationary and mobile phases, detector flow cell system along with the flow line to develop chromatographic fingerprinting for chemical and therapeutic standardizations.
 81. A detector flow cell with thermally varying and controlling facility which change the temperatures as programmed and detect the bathochromic, hypso chromic, hyper chromic and hypo chromic variations of the spectrum at varying analytical conditions, of the samples passing through the flow cell for chromatographic fingerprinting for chemical and therapeutic standardizations.
 82. A method for the standardization of matter and radiation for the assessment of the quantum energy they can deal and arrange the matter in an order based on their physico chemical properties and kinetics.
 83. A method for the standardization of matter and radiation for the assessment of the quantum energy they can deal and arrange the matter in an order based on their physico chemical properties and kinetics for quantum chemical studies.
 84. A method as claimed in claim 1, wherein the chromatographic fingerprint data is obtained for identifying the chemical constituents present in it for the purpose of chemical, therapeutic and process standardization and quality control activities of African, Allopathic, Ayurvedic, Chinese, Homoeo, Kampo (Japanese), Siddha, Unani and Tibetan medicines or any medicines.
 85. A method for the standardization as claimed in claim 1, wherein standardization of matter and radiation for the assessment of the quantum energy they can deal and arrange the matter in an order based on their physico chemical properties and kinetics for quantum bio chemical studies.
 86. A method for the standardization of matter and radiation for the assessment of the quantum energy they can deal and arrange the matter in an order based on their physico chemical properties and kinetics for quantum bio physical studies.

87. A method for the standardization of matter and radiation for the assessment of the quantum energy they contain and arrange the matter in an order based on their physico chemical properties and kinetics for quantum chemical studies by using an equation $E=m^{\pm p} C^{\lambda}$ Where in m is the mass, p is polarity at specific temperature and pressure of the analyte material and C is the speed of the respective radiation.
88. A method for the standardization of matter for the assessment of the chemical, therapeutic and biological properties by the generalization of their commonalities and differences in the profile.
89. A method of analysis using the patterns of electromagnetic radiations absorbed or emitted, generated for a sample for chemical and therapeutic standardization.
90. A method of analysis using the graphical data patterns of electromagnetic radiations absorbed, emitted, reflected, refracted, interference, diffracted with the analyte and generate data for a sample by a separation method using different properties of the carrier media to separate over a separation media, separating and arranging the constituents in a specific order of polarity along with measured responses of the constituents with interaction of electromagnetic radiations for chemical and therapeutic standardization of material under test.
91. A method of analysis for the standardization of organic reagents for chemical and activity standardization.
92. A chromatographic fingerprinting method of analysis for the chemical and therapeutic standardization of Nanoparticles in materials.
93. A method for the chemical and therapeutic standardization of nutritional values of foods, nutritional dietetics and nutritional genomics.
94. A method of chromatographic fingerprinting for the analysis of proteins and genetic material for proteomics and genomics studies.
95. A method of chromatographic fingerprinting which provides the properties of the analyte with out a referral standard.
96. A software as claimed in claim 10, wherein the software is capable of interpreting constituents between 0-20 minutes as Pitta in nature which are in Zone 1, of the image where in 0 minutes is acute and 20 is chronic.
97. A software as claimed in claim 10, wherein the software is capable of interpreting Constituents in the range of retention times 20-40, as Kapha in nature which are in

Zone 2, of the image where in where in the constituents at 20min acts on acute and 40min acts on chronic conditions.

98. A software as claimed in claim 10, wherein the software is capable of generating a chromatogram based on the color analyzed (Extracted from finger print using a Graphic User Interface software developed), having peaks at various retention times along with different physico chemical properties like conjugative and polarity properties of the analyte constituents eluted with time.
99. A software as claimed in claim 10, wherein the software is capable of interpreting Constituents in the range of retention times 40-60, as Vata in nature which are in Zone 3, of the image where in where in constituents at 40 acts on acute and 60 is chronic conditions.
100. A software as claimed in claim 10, wherein the software is capable of interpreting Constituents in the range of retention times 5-15, as Kashaya, Astringent, in nature which are in Zone 1, of the image.
101. A software as claimed in claim 10, wherein the software is capable of interpreting Constituents in the range of retention times 15-20 min, as Katu, Pungent, in nature which are in Zone 1, of the image.
102. A software as claimed in claim 10, wherein the software is capable of interpreting Constituents in the range of retention times 25-35, as Tikta, Bitter, in nature which are in Zone 2, of the image.
103. A software as claimed in claim 10, wherein the software is capable of interpreting Constituents in the range of retention times 25-35, as Lavana, Salty, in nature which are in Zone 2, of the image.
104. A software as claimed in claim 10, wherein the software is capable of interpreting Constituents in the range of retention times 30-40, as Amla, Sour, in nature which are in Zone 2, of the image.
105. A software as claimed in claim 10, wherein the software is capable of interpreting Constituents in the range of retention times 35-55, as Madhura, in nature, which are in Zone 2 and 3, of the image.
106. A software as claimed in claim 10, wherein the software is capable of interpreting Constituents absorbing from 200-800 nm, as Dosha kara/Vridhi, in nature which are in Zone 1,2 and 3, of the image when a sample is analyzed on a separation media and molecules arranged in an order of polarity.

107. A software as claimed in claim 10, wherein the software is capable of interpreting Constituents absorbing from 200-400 nm, as Increase of respective conjugative property said to be Dosha hara, in nature which are in Zone 1,2 and 3, of the image when a sample is analyzed on a a separation media and molecules arranged in an order of polarity.
108. A software as claimed in claim 10, wherein the software is capable of interpreting Constituents absorbing from 200-800 nm, as Increase of respective property will be Sheeta Veerya, in nature which are in Zone 2, of the image when a sample is analyzed using a separation media.
109. A software as claimed in claim 10, wherein the software is capable of interpreting Constituents absorbing from 200-800 nm, as Increase of respective property will be Ushna Veerya, in nature which are in Zone 1, of the image when a sample is analyzed using a separation media.
110. A software as claimed in claim 10, wherein the software is capable of interpreting the Vipaka (Post assimilative) property, which is absent before and present after interacting with an enzyme in a medicine/biological fluid.
111. A software as claimed in claim 10, wherein the software is capable of interpreting the Sookshma property (Smaller molecules or absorbing sharply at lesser wave lengths. 190-220 nm), which are in Zone 1,2 and 3, of the image when a sample is analyzed using a separation media.
112. A software as claimed in claim 10, wherein the software is capable of interpreting the Rooksha (Volatile high to medium polar molecules) property based on the absorption spectra and polarity of the ingredients in Zone 1,2 and 3, of the image when a sample is analyzed using a separation media.
113. A software as claimed in claim 10, wherein the software is capable of interpreting the Snidha (Viscous medium to non polar molecules) property based on the absorption spectra of 200-800 nm and polarity of the ingredients in Zone 1,2 and 3, of the image when a sample is analyzed using a separation media.
114. A software as claimed in claim 10, wherein the software is capable of interpreting the Laghu property based on the absorption spectra, polarity and less number of ingredients in Zone 1,2 and 3, of the image when a sample is analyzed using a separation media.
115. A software as claimed in claim 10, wherein the software is capable of interpreting the Guru property based on the absorption spectra, polarity and large number of ingredients in Zone 1,2 and 3, of the image when a sample is analyzed using a separation media.

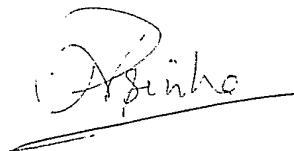
116. A software as claimed in claim 10, wherein the software is capable of interpreting the Sandra (Viscous molecules) property based on the absorption spectra of 200-800 nm and polarity of the ingredients in Zone 2, of the image when a sample is analyzed using a separation media.
117. A software as claimed in claim 10, wherein the software is capable of interpreting the Sthoola (heavy molecules) property based on the absorption spectra and polarity of the ingredients in Zone 3, of the image when a sample is analyzed using a separation media.
118. A software as claimed in claim 10, wherein the software is capable of interpreting the chemical and therapeutic property of the analyte based on the 3-D and contour chromatographic fingerprints developed due to the interaction of radiation with matter and the data graph divided in to different zones and marked with respective therapeutic property based on specific X, Y and Z coordinates of the data graph or movie, wherein the retention time value is not a limitation.
119. A method of Chromatographic Fingerprinting as claimed in claim 1, wherein the method is useful for the standardization of petroleum products.
120. A method of Chromatographic Fingerprinting as claimed in claim 1, wherein the method is useful for the standardization of agricultural products.
121. A method of Chromatographic Fingerprinting as claimed in claim 1, wherein the method is useful as a diagnostic tool for the analysis of healthy and diseased samples.
122. A method of Chromatographic Fingerprinting as claimed in claim 1, wherein the method is useful for the toxicity studies.
123. A method of Chromatographic Fingerprinting as claimed in claim 1, wherein the method is useful in forensic sciences.
124. A method of Chromatographic Fingerprinting as claimed in claim 1, wherein the method is useful for the standardization of industrial products.
125. A method of Chromatographic Fingerprinting as claimed in claim 1, wherein the method is useful for the standardization of environmental samples.
126. A method of Chromatographic Fingerprinting as claimed in claim 1, wherein contour and 3-D chromatograms of the analyte is the basis for identification and standardization of chemical constituents to limit the scope of the invention.

127. A method as claimed in claim 1, wherein Chromatographic Fingerprint data obtained is used for the study of variation of chemical constituents in biological samples and to identify and standardize the chemical constituents in them to know the pathological, healthy and diseased status of the source living being thus leading to chemical and therapeutic standardization.
128. A method as claimed in claim 1, wherein Chromatographic Fingerprinting is used for the adulterated, substituted, contradictual, commercial food and drug samples and to identify the chemical and therapeutic properties of pure and impure.
129. A method as claimed in claim 1, wherein Chromatographic Fingerprint data obtained is used for the study of variation of chemical and therapeutic properties of the constituents due to various ecological factors, geological factors, genotype and phenotypic variations (in plant and animals) in naturally occurring samples and to identify and standardize the chemical constituents in them.
130. A method as claimed in claim 1, wherein Chromatographic Fingerprint data obtained is used for the study of chemical constituents in synthetically prepared samples and to identify and standardize the chemical constituents in them for chemical and therapeutic standardization which ever is applicable.
131. A method as claimed in claim 1, wherein Chromatographic Fingerprint data obtained is used for the study of chemical constituents in herbal products of single medicine samples and to identify the chemical constituents in them for chemical and therapeutic standardization.
132. A method as claimed in claim 1, wherein Chromatographic Fingerprint data chromatograph is used for the study of chemical constituents in herbal products of formulated medicine samples and to identify the chemical constituents in them for chemical and therapeutic standardization.
133. A method as claimed in claim 1, wherein Chromatographic Fingerprint data obtained is used for the study of variation of chemical constituents in different brands of products of single and formulated food and medicine samples and to identify the chemical constituents in them for chemical and therapeutic standardization.
134. A method as claimed in claim 1 wherein, Chromatographic Fingerprint data of medicines facilitates to categorize and quantify the constituents of a medicine based on polarity and conjugation from 3-D and contour chromatograms and assess the therapeutic efficacy of the medicine on which humors it is going to act (vitiate, balance).
135. A method as claimed in claim 1, wherein Chromatographic Fingerprint data obtained enables to understand and standardize the Physico-Chemical properties of the

medicines like color for the use of therapeutic standardization of medicines and humors (Tri Doshas) using conjugative and polarity properties given in the chromatographic fingerprints.

136. A method as claimed in claim 1, wherein the method enables to understand and standardize the Physico-Chemical properties of the medicines like Tastes (Rasa) like Sweet, Sour, Salty, Pungent, Bitter and Astringent (Madhura, Amla, Lavana, Tikta, Katu and Kashaya as described in Ayurveda) used for therapeutic standardization using conjugative and polarity properties given in the chromatographic fingerprints.
137. A method as claimed in claim 1, wherein the method enables to understand and standardize the microcosm and macrocosm of the medicines used for therapeutic standardization using conjugative (indicated on Y-axis) and polarity (indicated on X axis) properties given in the chromatographic fingerprints.
138. A method as claimed in claim 1, wherein the data obtained enables to understand and standardize the Physico-Chemical properties of the medicines like Property, Potency, Metabolite, Specific properties like Chirality of the molecules (Guna, Veerya, Vipaka, Prabhava) used for the therapeutic standardization using conjugative and polarity properties of the individual constituents and the whole medicine shown in the chromatographic fingerprints.
139. A method as claimed in claim 1, wherein Chromatographic Fingerprint data enables to understand and standardize the Physico-Chemical properties (Gunas) of the medicines like Cold, Hot, Slow in action, Sharp in action, Heavy, Light, Soft Lubricated Supple, Dry (Sheeta, Ushna, Manda, Teekshna, Guru, Laghu, Snigdha, Rooksha as described in Ayurveda) used for the therapeutic standardization using conjugative and polarity properties of the medicines shown in chromatographic fingerprints.

dated 28.1.2004



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ABSTRACT

The present invention provides a method of standardization of chemical and therapeutic properties and quality of foods and medicines. The present invention provides a method of chromatographic finger printing facilitating correlation of traditional methods used for chemical and therapeutic standardization of medicines and humors in the living things with physico chemical properties of the medicines and their constituents. The method is used for the qualitative and quantitative analysis of the energy involved in the medicines and living things and to understand various bio chemical reactions in living things using an energy system. It provides a rational basis to understand the traditional methods of assessment of chemical and therapeutic qualities of materials used for the said purpose. The present invention also provides the influence, of factors like pH, temperature, viscosity and ionic nature of the media along with atomic and molecular properties indicating the chemical and therapeutic values of the foods and medicines of natural and synthetic nature. The analysis of biological samples like blood indicated the utility of the method for the assessment of clinical pathological conditions of healthy and diseased. This facilitates for a better drug discovery, drug monitoring, drug targeting and drug profiling using different features of 3-D energy box created after analyzing the sample by different analysis, separation and detection methods.

TABLE I

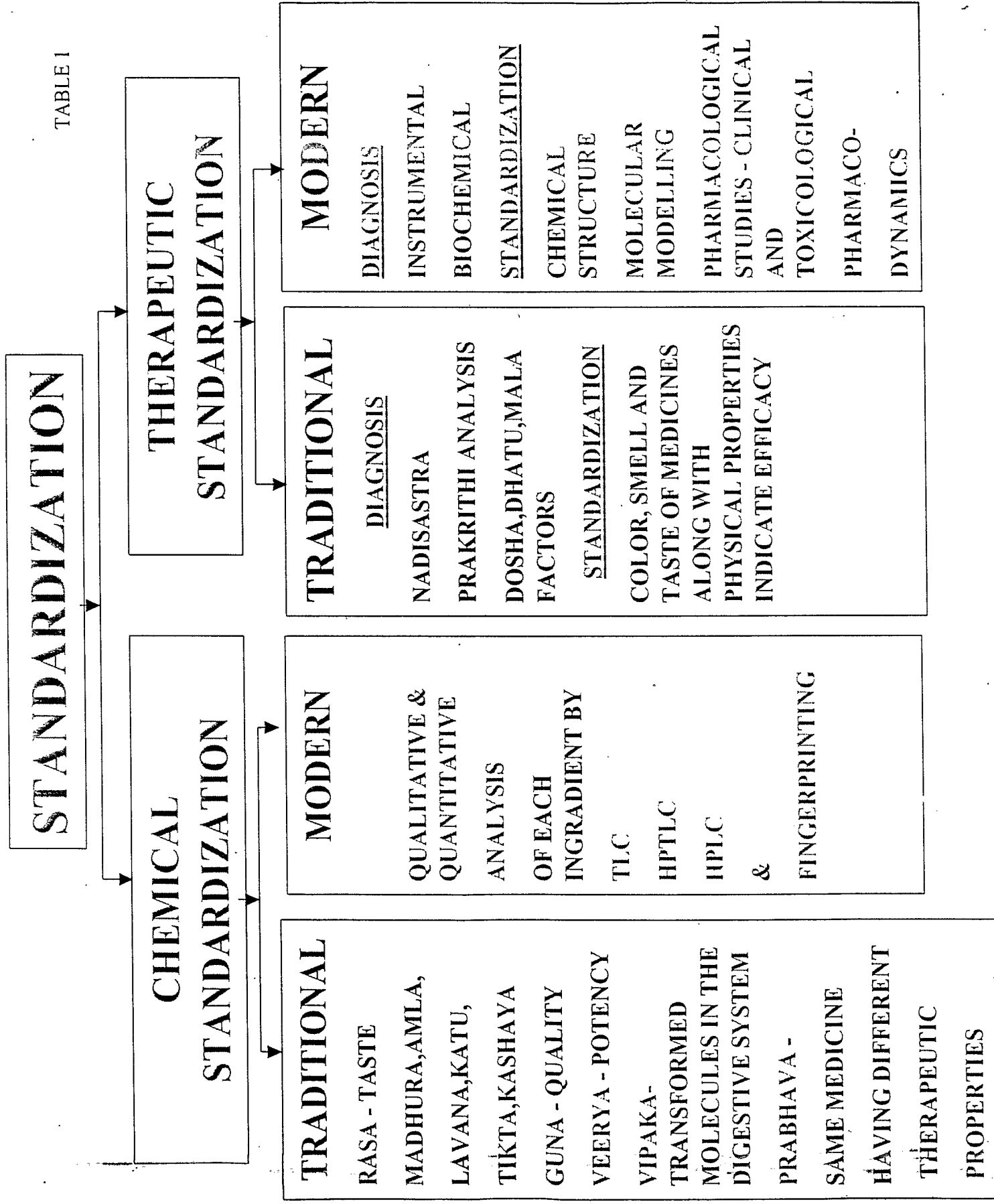


Table 2

Shadrasa Nigantu

Madhura skanda	Amla skanda	Lavana skanda	Tikta skanda	Katu skanda	Kashaya skanda
Gritha	Thakra	Saindhava	Vasa	Naga kesara	Shyama
Madhu	Dadhi	Souvarchala	Kushta	Ela	Trivruith
Taila	Mastu	Bida	Patola	Bhrita ela	Musta
Dugda	Kanjika	Ushara	Parpataka	Tamala patra	Mustaka
Navaneetha	Danyamla	Oudbhida	Ativisha	Lavanga	Tilivaka
Jala	Rasamla	Samudraja	Prativisha	Lavanga pushpa	Lodhira
Vidaari	Tushodaka	Yava kshara	Patha	Ajai	Akshi bhesha
Ksheeraavidari	Madya	Suvarchala kshara	Guduchi	Krishna jeeraka	Laksha
Indevari	Kinwa	Tankana	Soma valka	Shunti	Peelu
Shatavari	Amlavethasa	Naga	Khadira	Shringa vera	Kupeelu
Kakoli	Koshanra	Vanga	Useera	Pippali	Shami
Ksheera kakoli	Vrikshamla		Hribera	Maricha	Bilwa
Atmagupta	Dadima		Katuki	Gaja pippali	Haritaki
Rishyaprokta	Amalaki		Murva	Chitraka	Vibhitaki
Sariva	Chincha		Haridra	Pippali mula	Amalaki
Gopavalli	Amra		Darvi	Gandha trina	Rakta padi
Utpala sariva	Amrataka		Peeluparni	bhu trina	(lajjalu)
Meda	Kapitha		Kiratatikt	Vidanga	Vamsa
Maha meda	Chukrika		Nimba	Talisa patra	Mayura shika
					Ambasta

Table 2

Jeevanthi	Karamarda	Maha nimba	Chavya	Jambu
Payasya	Katwanga	Pushkarmula	Nakha	Kasa marda
Kharjuri	Kasheruka	Agni mandha	Vyaghra nakhi	Varuna
Parushaka	Mathulunga	Laghu agnimandha	Sankha nakha	Chakra marda
Lekyapathra	Lakucha	Snuhi	Sarpa gandha	Asoka
Gudapaki	Rudraksha	Vajri	Suvaha	Kramuka
Madhuka	Naranga	Patra snuhi	Surasa	Manjista
Madhulika	Krishnaloha	Karkata shringi	Deva dumdhubi	Yavasa
Kshudrasaha	Varthaloha	Patala	Phanijjaka	Punnaga
Mudgaparni	Mandoora	Kashmarya	Kalamala	Kovidara
Mashaparni		Kuberaksha	Lasuna	Asmantaka
Shalaparni		Syonaka	Palandu	Dhataki
Prishniparni		Bharangi	Vyaghri	Sirisha
Srigaalavinna		Madana phala	Bhrhati	Vrikshadani
Kusha		Ikshwaku	Mishi	Aswagandha
Draksha		Jeemutha	Shyleeya	Aparajitha
Mridweeka		Bimbi	Tilaparni	Asph0taka
Ikhuka		Shan pushpi	Drona pushpi	Vikamkata
Ikshwalika		Kutaja	Ati chatra	Sleshmataka
Mathsyandika		Indra yava	Mulaka	Tinisha
Sithothpala		Dhanyaka	Kshudra mulaka	Ashwa karna
Yavasa sharkara		Koshataki	Shobanjana	Kakubha
Vatyalika (bala)		Indra varuni	Grinjana	Prasarini
Vatyayani (atibala)		Eranda	Sweta maricha	Aswatha

Table 2

	Gangeruki				Rakta eranda	Sarpasha	Plalasha
	Sahasraveerya				Aragvadhha	Siddardhaka	Nyagrodha
	Neela doorva				Vacha	Mundi	Kakodumbara
	Maha doorva				Sireyaka	Maha sravani	Udumbara
	Gokshura				Rasna	Punarnava	Bakula
	Narikela				Trayamana	Varshabh	Bandhuka
	Akshota				Ajashringi	Rakta pushpa	Sphurjitaka
	Rajadana				Neeli	Nikhumbha (danti)	Maha shaka
	Paneyavalli				Vishanika	Naga danti	Tumburu
	Priyala				Bakuchi	Deva daru	Kadamba
	Ikshu				Dhavana	Hingu	Maha kadamba
	Parevatham				Khara patra	Aja moda	Shallaki
	Thavaksheeri				Kamkushtha	kachura	Arimeda
	Panasa				Manduka parni	Taskari	Katphala
	Mahaphala				Saptala	Harenuka	Dhanvana
	Vridi				Surya kantha	Lata kastoori	Kachura
	Kadali				Priyangu	Ela patra	Japa pushpa
	Jeevaka				Bhringa raja	Jati patra	Avartaki . (hema pushpi)
	Rishabhaka				Krishna agaru	Jati phala	Kumari
	Tanduleya				Nandi vraksha	Kastoori	Kamboji (masha parni)
	Padma				Bhranhini	Gandha mariara	Yuthika
	Sihavaluka				Tagara	Kunduru	Kubjaka

Table 2

Kokilaksha				Bola	Haritala	Verataru
Nalika				Sarala	Gandhaka	Ketaki
Dadhipushpa				Saileeya	Hingula	Matsyaadani
Nyagrodha				Mahisaksha	Manahshila	Pinditaka
Kharavriksha				Shilajit	Tutha	Putranjeeva
Sahadevi				Vrichikali	Bhallataka	Shala
Sunishannaka				Kampillaka	Rasaka	Sarja
Upodaki				Kataka	Ankola	Padmini
Mridupusha				Arka	Krishna nimba	Padma
Yastimadhu				Langali	Peelu	Pundareeka
Lakshmana				Dhatura	Champaka	Kokanada
Mathsyakshi				Krishna dhatura	nava mallika	Sougandhika
Karpasa				Elavaluka	Asta patrika (malli)	Indee vara
Agathsyas				Ervaruka	Sada pushpi	Kinjalka
Vasthuka				Karaveera	Visha mushti	Asana
Anantha (amaravalli)				Kakamachi	Harita manjati	Prapundarika
Vishnukantha				Gunja	Surana	padmaka
Vathsadani				Swetha gunja	Hingu patri	Sourashtrika
Jeevanthika				Krishna gunja	Sukla kanda	Khatika
Kasheruka				Bhmyamalaki	vajra valli	Abhraka
Bhumikanda				Girikarni	Bhrma dandi	Bhoorja patra
Shringataka				Giri karnika (black)	Eswari	Sreeveshtaka
Sthouneyaka				Sarapunkha	Deeghangi	Shalmali

Table 2

Kushmanda			Palasha	Nadi kanta	Shalmali niryas
Thrapusa			Sapta chada	Davagni (agni jwala)	Rajitha
Vyala putrika			Badara	Pittala	Tamra
Ervaruka			Kakaadani	Gomutra	Rasanjana
Alabu			Varahi		Souveeranjana
Dhamargava			Hamsapadi		Strothanjana
Maha jalini			Jati		Pushpanjana
Madhuchista			Mushkaka		Neelanjana
Swarna			Neela nirgundi		Gairika
Shali dhanya			Shetailka (white)		Sindhura
Neevara			Karanja		Kasisa
Priyangu			Puti karanja		Pushpa kasisa
Shyamaka			Angara valli		Makshika
Kora doosha			Atasi		Samudra phena
Kodrava			Tumburu		Pashana bhedi
Yavanala			Avartani		Sankha
Yava			Ingudi		Vatsa nabhi
Mudga			Vetra		Parida
Masha			Shankini		
Chanaka			Guda manajari		
Kulutha			Kshavaka		
Nispava			Kapitha patra		

	Rajamasha				Kakajingha		
	Adhaki				Sarapunkhi		
	Chakshushya				Trivruth patra gadida gadapa		
	Kalaya				Visha musti		
	Tila				Trivruth		
					Kakandha		
					Prasarini		
					Raja bala		
					paribhdra		
					Suka nala		
					Madhu parni		
					Nimba		
					Karkotaki		
					Kara vellaka		
					Surya valli		
					Rajika		
					Uttama varuni		
					Tilvaka		
					Kamsya		

Table 3

ABBREVIATIONS FOR SHADRASA NIGHANTU

S.No.	SANSKRIT TERM USED IN TEXT	ENGLISH / MEDICAL EQUIVALENT TERM
1.	<i>ADHMANA</i>	Flatulent colic
2.	<i>AGNI MANDYA</i>	Indigestion
3.	<i>AMATISARA</i>	Mucous diarrhoea
4.	<i>AMAVATA</i>	Arthritic conditions
5.	<i>AMLA PITTA</i>	Hyper acidity
6.	<i>ANAHA</i>	Flatulency
7.	<i>ANULOMANA</i>	Epistssis / Flatulency
8.	<i>APACHI</i>	Adenitis
9.	<i>APASMARA</i>	Epileptic conditions
10.	<i>APATANTRAKA</i>	Convulsions
11.	<i>ARBUDA</i>	Tumours
12.	<i>ARDITA VATA</i>	Facial paralysis
13.	<i>AROCHAKA</i>	Distaste
14.	<i>ARSHAS</i>	Haemorrhoides
15.	<i>ARUCHI</i>	Anorexia
16.	<i>ASMARI</i>	Renal calculus
17.	<i>ASMARI BHEDANA</i>	Lithno- triptic
18.	<i>ASTHI</i>	Related to bone
19.	<i>ATISARA</i>	Diarrhoea
20.	<i>AVRUSHYA</i>	Causes infertility / impotency
21.	<i>BALA ROGA</i>	Paediatric diseases
22.	<i>BALYA</i>	Tonic
23.	<i>BHADIYA</i>	Deafness
24.	<i>BHAGNA SANDHANA</i>	The one which heals the bone fracture
25.	<i>BHEDANEEYA</i>	Mass breaking
26.	<i>BHOOTA VYADHI</i>	Phychic disorders
27.	<i>BHRAMA</i>	Giddiness

Table 3

28.	<i>BRIMHANEYYA</i>	Bulk promoting
29.	<i>CHAKSHUSHYA</i>	Ophthalmic- good for eyes
30.	<i>CHARDI</i>	Vomiting
31.	<i>CHEDHANEYYA</i>	Expectorant
32.	<i>DAHA</i>	Burning sensation
33.	<i>DAHA PRASAHMANA</i>	Refrigerant
34.	<i>DANTA ROGA</i>	Diseases pertaining to teeth
35.	<i>DEEPANA</i>	Stomachic
36.	<i>DOUBALYA</i>	Weakness
37.	<i>DUSHTA VRANA</i>	Chronic ulcer
38.	<i>GALA GANDA</i>	Goiter
39.	<i>GALA ROGA</i>	Diseases pertains to throat
40.	<i>GANDA MALA</i>	Cervical lymph adenitis
41.	<i>GARBHA PATAKA</i>	Abortifacient –which induces abortion
42.	<i>GARBHA SRAVA</i>	Abortion
43.	<i>GARBHASHAYA</i> <i>SAMKOCHA</i>	Induces Uterine contraction
44.	<i>GARBHASHAYA</i> <i>VISHODHANA</i>	Which improve the functions of uterus
45.	<i>GLANI</i>	Fatigue
46.	<i>GRAHA ROGA</i>	Diseases caused by infections to the infants / children
47.	<i>GRAHANI</i>	Tropical sphrue / ulcerative colitis
48.	<i>GRAHI</i>	Astringent
49.	<i>GUDA ROGA</i>	Diseases related to anus
50.	<i>GULMA</i>	Abdominal lump
51.	<i>HARA</i>	Pacify
52.	<i>HIKKA</i>	Hiccough
53.	<i>HRIDROGA</i>	Ailment of heart
54.	<i>HRIDYA</i>	Cardio-tonic- good for heart
55.	<i>HRILLASA</i>	Nausea

Table 3

56.	<i>JALA SHUDHI KARA</i>	The one which purify water
57.	<i>JEERNA JWARA</i>	Chronic fever
58.	<i>JEEVANEYYA</i>	Vitalizing
59.	<i>JWARA</i>	Types of Fever
60.	<i>KANDU</i>	Pruritic conditions
61.	<i>KAMALA</i>	Jaundice
62.	<i>KANTI PRADA</i>	Improves glow
63.	<i>KANTYA</i>	Good for throat
64.	<i>KAPHA</i>	One of the Tri doshas
65.	<i>KARA/ VRUDHI</i>	Vitiated
66.	<i>KARNA ROGA</i>	Diseases related to ear
67.	<i>KARSHYA</i>	Emaciation
68.	<i>KASA</i>	Cough
69.	<i>KATI SHOLLA</i>	Lumbago
70.	<i>KESHYA</i>	Trichogeneous-
71.	<i>KHALITYA</i>	Alopecia
72.	<i>KITHIBHA</i>	Psoriasis
73.	<i>KLEDA</i>	Liquefying
74.	<i>KRIMI</i>	Worm infestation
75.	<i>KRIMIGHNA</i>	Anthelmintic
76.	<i>KSHAYA</i>	Degenerative conditions
77.	<i>KUSHTA</i>	Diseases of skin and involvement of other tissues
78.	<i>LEKHANA,</i>	Emaciating
79.	<i>MADA KARA</i>	Syncope
80.	<i>MAJJA DATHU</i>	Bone marrow
81.	<i>MAMSA DHATU</i>	Muscular tissue
82.	<i>MEDHYA</i>	Intellect promoting
83.	<i>MEDO DHATU</i>	Adipose tissue
84.	<i>MEDO ROGA</i>	Adipose tissue disorders
85.	<i>MOHA</i>	Delusion

Table 3

86.	<i>MOORCHA</i>	Fainting
87.	<i>MOOSHIKA DAMSA</i>	Rat bite
88.	<i>MUTRALA</i>	Diuretic
89.	<i>MUDHA GARBHA</i>	Obstructed labour
90.	<i>MUKHA ROGA</i>	Ailments of oral cavity
91.	<i>MUTRA GHATA</i>	Urinary obstruction
92.	<i>MUTRA KRICHRA</i>	Dysuria-painful micturition
93.	<i>MUTRA SAMGRAHANEYYA</i>	Urinary astringent / anti-diuretic
94.	<i>MUTRA VIRAJANEETA</i>	Urinary de pigmenter
95.	<i>NETRA ROGA</i>	Ailments of eye
96.	<i>NETRA AHITA</i>	Not good for eyes
97.	<i>NIDRA JANANA</i>	Soporific- which induces sleep
98.	<i>OUSHTA ROGA</i>	Diseases of lips
99.	<i>PACHANA</i>	Digestive
100.	<i>PALITYA</i>	Premature graying of hair
101.	<i>PAMA</i>	Scabies
102.	<i>PANDU</i>	Anemic conditions
103.	<i>PARSHWA SHOOLA</i>	Auxiliary pain, Pleurisy
104.	<i>PEENASA</i>	<i>Nasal catarrh</i>
105.	<i>PHIRANGA</i>	Syphilis
106.	<i>PITTA</i>	One of the Tri doshas
107.	<i>PLEEHODARA/ PLEEHA VRUDHI</i>	Spleeno- megaly/ Spleenopathy
108.	<i>POUSHTIKA</i>	Nutritive
109.	<i>PRAMADHI</i>	Cleansing
110.	<i>PRAMEHA</i>	Diabetes
111.	<i>PRASEKA</i>	Any kind of liquid oozing out
112.	<i>PRATISHYAYA</i>	Common cold

Table 3

113.	<i>PRAVAHIKA</i>	Dysentery
114.	<i>PREENANA</i>	Nourishing
115.	<i>PURISHA</i> <i>SAMGRAHANEYA</i>	Intestinal astringent
116.	<i>PURISHA VIRAJANEETA</i>	Faecal depigmenter
117.	<i>RAJA YAKSHMA</i>	Tuberculosis
118.	<i>RAKSHOGHNA</i>	Which prevents mental disorders
119.	<i>RAKTA DHATU</i>	Blood tissue
120.	<i>RAKTA PITTA</i>	Bleeding disorders
121.	<i>RAKTA PRADARA</i>	Menorrhagia
122.	<i>RAKTA SAMGRAHAKA</i>	Styptic
123.	<i>RAKTA VIKARA</i>	Diseases related to blood
124.	<i>RAKTA ARSHAS</i>	Bleeding haemorrhoids
125.	<i>RAKTATISARA</i>	Dysentery
126.	<i>RASA, DHATU</i>	Lymphoid tissue
127.	<i>RASAYANA</i>	Rejuvenating
128.	<i>RECHANA</i>	Purgative
129.	<i>ROCHANA/RUCHYA</i>	Improves taste
130.	<i>SAMSRANA</i>	Mild laxative
131.	<i>SANDHANEYA</i>	Healing
132.	<i>SANJNA STHAPANA</i>	Resuscitative
133.	<i>SANNIPATAJA JWARA</i>	Typhoid fever
134.	<i>SARPA DAMSA</i>	Snake bite
135.	<i>SHAMANA</i>	Procedure involved
136.	<i>SHODHA HARA</i>	Anti phlogistic/ anti inflammatory
137.	<i>SHODHA</i>	Inflammation
138.	<i>SHODHANA</i>	Procedure involved in removal of vitiated doshas out of the body
139.	<i>SHONITA STHAPANA,</i>	Haemostatic
140.	<i>PRAJA STHAPANA</i>	Anti abortifacient

Table 3

141.	<i>SHOOLA</i>	Colic
142.	<i>SHOOLA HARA</i>	Anti spasmodic
143.	<i>SHOSHA</i>	Emaciation
144.	<i>SIRO ROGA</i>	Cephalopathy
145.	<i>SLEEPADA</i>	Filariasis
146.	<i>SMRITHI KARA/ PRADA</i>	Increases memory
147.	<i>SNEHANA</i>	Oleation
148.	<i>SOMA ROGA</i>	Poly urea
149.	<i>SRAMA HARA</i>	Energy compensator
150.	<i>STHAMBANA</i>	Restriction
151.	<i>STHANYA KARA/ VRUDHI</i>	Galactagogue
152.	<i>STHANYA SHUDHIKARA</i>	Galacto purifier
153.	<i>SUGHANDHA</i>	Aromatic
154.	<i>SUKRA DHATU</i>	Reproductive tissue
155.	<i>SUKRA SHODHANA</i>	Tissue depurative
156.	<i>SUKRALA</i>	Increases quantity of semen
157.	<i>SWARYA</i>	Good for throat and voice
158.	<i>SWASA</i>	Respiratory diseases
159.	<i>SWEDALA/ SWEDA JANANA</i>	Sudorific
160.	<i>SWETA PRADARA</i>	Leucorrhoea
161.	<i>SWITRA</i>	Vitiligo
162.	<i>TAMAKA SWASA</i>	Bronchial Asthma
163.	<i>TANDRA</i>	Excessive yawning
164.	<i>TARPANA</i>	Passification
165.	<i>TIMIRA</i>	Numb ness
166.	<i>TRIDOSHA</i>	Three physiological principles of body
167.	<i>TRISHNA</i>	Hyperdipsia
168.	<i>TRUPTI KARA</i>	Saturative

Table 3

169.	<i>TRUPTIGHNA</i>	Anti saturative
170.	<i>TWACHYA</i>	Which keeps the skin healthy and soft.
171.	<i>UDARA ROGA</i>	Abdominal distension
172.	<i>UDARDA PRASHAMANA</i>	Wheals (Urticarial)
173.	<i>UDAVARTHA</i>	Intestinal and other kinds of obstruction
174.	<i>UNMADA</i>	Mental disorders
175.	<i>UTTEJAKA</i>	Stimulant
176.	<i>VAJIKARANA / VRISHYA</i>	Aphrodisiac
177.	<i>VAMAKA</i>	Induces Vomiting
178.	<i>VARNYA</i>	Improves complexion
179.	<i>VASTI SHOOLA</i>	Cystalgia –pain in bladder region
180.	<i>VATA</i>	One of the tri doshas
181.	<i>VATA RAKTA</i>	Arthritic condition
182.	<i>VAYAH STHAPANA</i>	Anti aging
183.	<i>VEDANA STHAPANA</i>	Anodyne-allays pain
184.	<i>VIBHANDA</i>	Obstruction
185.	<i>VISARPA</i>	Erysipelas
186.	<i>VISHAMA JWARA</i>	Malarial fever
187.	<i>VISHTAMBHA</i>	Abdominal
188.	<i>VISPHOTA</i>	Eruptive skin disorders
189.	<i>VISUCHIKA</i>	Cholera
190.	<i>VRANA</i> <i>SHODHANA/ROPANA</i>	Vulnerary
191.	<i>YAKRIT VRUDHI</i>	Hepatomegaly
192.	<i>YOGA VAHI</i>	Carrier, Anupana
193.	<i>YONI ROGA</i>	Vaginopathy- diseases related to vagina

KASHAYA SKANDA

SL. NO	SANSKRIT NAME	ENGLISH / LATIN NAME	THERAPEUTIC EFFICACY
1.	SHYAMA	<i>Operculina turpethum</i>	Kapha pitta hara, rechana Jwara, shodha, udara, pandu, kamala, arshas
2.	TRIVRUTH	<i>Operculina turpethum</i>	
3.	MUSTA	Cyperus rotundus	Kapha pitta hara, deepana, pachana, grahi lekhana Jwara, daha, aruchi, krimi, medo roga
4.	MUSTAKA	Cyperus scariosus	
5.	TILVAKA	Lodhra bheeda	Kapha pitta hara, grahi, chakshushya, Rakta pitta, atisara, pravahika, shodha, jwara, pradara
6.	LODHRA	Symplocos racemosus	
7.	AKSHI BHESHAJA	Strychnos potatorum	Kapha vata hara, lekhana, chakshushya, vamaka, visha hara Mutra krichra, asmari, sarkara, kamala, pandu, shodha, prameha
8.	LAKSHA	Laccifera lacca	Kapha pitta hara, Hikka, swasa, kasa, jwara, vana, kshata, visarpa, krimi, kushta
9.	PEELU	<i>Salvadora percisa</i>	Kapha vata hara, rechana Gulma, arshas, udara, raktapitta, mutra krichra, shodha
10.	KUPEELU	Strychnos nux-vomica	Kapha vata hara, grahi, vishaghna Kushta, kandu, arshas, vana, vata roga
11.	SHAMI	Prosopis specigera	Kapha pitta hara, kasha hara Kasa, swasa, kushta, krimi, arshas, raktatisara, raktaarshas

Table 4

12.	BILWA	Aegel marmelos	Vata kapha hara, deepana, pachana, grahi Shodha, atisara, grahani
13.	HARITAKI	Terminalia chebula	Tridosha hara , deepana, pachana, grrahi, rasayana, anulomana, praja sthapana Kushta, prameha, arshas, shodha, hridroga, swasa, kasa ,hikka, netra roga, grahani, kamala, pandu
14.	VIBHITAKI	Terminalia belerica	Kapha pitta hara, bhedana, chakshushya, keshya, mada kari Kasa, swasa ,krimi, trishna, chardi Asmari, atisara
15.	AMALAKI	Phyllanthus emblica	Tridosha hara, deepana pachana, netrya, vayah sthapana, rasayana Rakta pitta, prameha, kushta, atisara, shoola, somaroga, sweta pradara, rakta pradara, netra roga
16.	RAKTA PADI (LAJJALU)	Mimosa pudica	Kapha pitta hara, sandhaneeya, purisha samgrahaneeya Atisara, rakta pitta, yoni roga, swasa, kushta, shodha, vrana
17.	VAMSHA	Bambusa arundinaecium	Kapha pitta hara chedana, vasti shodhana Kushta, prameha, mutra krichra, shodha
18.	MAYURA SHIKA	Actinopteres radiata	Kapha pitta hara, visha hara Atisara, pravahika, prameha
19.	AMBASTA	? Quercus infectoria	Kapha pitta hara, grahi, deepana Atisara, grahani, pravahika, sweta pra dara, mukha danta roga
20.	JAMBU	Eugenia jambolana	kapha pitta hara, vata kara, grahi, mutra samgrahaneeya Chardi, atisara, swasa, kasa, daha
21.	KASA MARDIA	Cassia occidentalis	Tridosha hara, pachana, vrishya Kasa, sa, hikka, sidhma, kushta, vicharchika, sleepada
22.	VARUNA	Crataeva religiosa	Kapha vata hara, deepana, Asmari, vidradhi, gulma, krimi, ganda mala
23.	CHAKRA MARDIA	Cassia tora	Kapha vata hara, medo hara Dadru kushta, kandu, krimi, gulma, kasa, swasa
24.	ASOKA	Saraca indica	Pitta hara, grahi, varnya, hridya Rakta pradara, shoola, gulma, adhmana, krimi, daha, trishna

Table 4

25.	KRAMUKA	Areca catechu	Kapha pitta hara, deepana Krimi, atisara, pravahika, prameha
26.	MANJISTA	Rubia cordifolia	Kapha pitta hara, swarya, varnya, visha hara Jwara, kushta, visarpa, prameha, shodha
27.	YAVASA	Alhagi camelorum	Kapha pitta hara, balya, deepana Jwara, daha, chardi, trishna, kushta visarpa
28.	PUNNAGA	Callophyllum inophyllum	Kapha pitta hara Raktatisara, rakta pradara, rakta pitta, amavata, mutra krichra
29.	KOVIDARA	Bauhunia purpurea	Kapha pitta hara grahi, Krimi, kushta, guda bhramsha, ganda mala, vrana
30.	ASMANTAKA	Kovidara bheda	
31.	DHATAKI	Woodfordia fruitcosa	Kapha pitta hara mada kari Ati sra, rakta pitta, trishna, visarpa, vrana
32.	SIRISHA	Albezzia lebbeck	Tridosha hara, varnya, visha hara, vedana sthapana Kushta, kandu, visarpa, kasa, swasa
33.	VRIKSHADANI	Vanda roxburgianam	Vata hara Amavata, karna srava visha hara
34.	ASWAGANDHA	Withania somnifera	Vata kapha hara, balya, rasayana, sukrala Kshaya, kasa, swasa, grandhi, apachi, vrana, vandhytwa, nidra nasha
35.	APARAJITHA	Clitoria terneta	Tri dosha hara Medhya, chakshushya, kantya, Kushta, shodha vrana, visha
36.	ASPHOTAKA	Aparajita bheda	

Table 4

37.	VIKAMKATA	Flocurita romantchii	Vata pitta hara, deepana, pachana, mutrala, Kamala, pleeha vridhi
38.	SLESHMATAKA	Cordia dichotoma	Kapha pitta hara, keshya, vishaghna Raktapitta, visphota, visarpa, kushta ,krimi ,shoola
39.	TINISHA	Ougeinia dalbergiodes	Kapha pitta hara, medo hara Kushta, prameha, switra, pandu, krimi, vrana
40.	ASHWA KARNA	Dipterocarpous turbinatus	Puya rakta nashaka Jwara, visphota, kandu , siro roga
41.	KAKUBHA	Terminalia arjuna	Kapha pitta hara, hridya, udarda prasamana,rasayana Hridroga, kshta kshaya,raktapitta, raktatisara, arsgas, vrana
42.	PRASARINI	Paederia foetida	Vata hara ,sara, Vata vyadhi, amavata, mutra krichra. arshas, shodha
43.	ASWATHA	Ficus religiosa	Kapha pitta hara, varnya, vrishya, yoni shodhana, vrana shodhana ropana Vata rkta , kushta,yoni roga, dushta vrana. daha
44.	PLAKSHA	Ficus lacor	Kapha pitta hara, mutra samgrahaneeya Daha, vrana, yoni roga, bhrama, rakta pitta
45.	NYAGRODHA	Ficus bengalensis	Kapha pitta hara, mutra samgrahaneeya, varnya, sthambhana Trishna, chardi , rakta pitta, visarpa, yoni roga, vyangya, vandhyt\wam
46.	KAKODUMBARA	Ficus hispida	Kapha pitta hara, grahi, sukrala, bhrimhana. Switra,kushta, pandu, kamala, arshas, vrana

Table 4

47.	UDUMBARA	Ficus racemosus	Kapha pitta hara, varnya, Vrana shodhana, ropana, Rakta pitta, daha, moorcha, trishna, bhasmkagni, atisara, rakta pradara
48.	BAKULA	Mimusops elengi	Kapha pitta hara, dantya, grahi, hridya Danta roga, atisara, switra,
49.	BANDHUKA	Pentapetes phoenicea	Vata pitta hara, kapha kara, grahi, vamaka, snehaka Visarpa,
50.	SPHURJITAKA	Diospyros embryopteris	Vata kara, kapha pitta kara, grahi, Prameha
51.	MAHA SHAKA	?Tectona grandis	Pitta hara, sthambaka, krimighna, Rakta pitta
52.	TUMBURU	Zanthoxylum alatum	Vata kapha hara Deepana, ruchya, vidahi Akshi karna, oushta, siro roga ,krimi,kushta, shoola, aruchi, swasa, pleeha
53.	KADAMBA	Anthocephalus cadamba	Vata kapha kara, pitta hara, saraka , sthnya kara, shopha vrana daha kasa,
54.	MAHA KADAMBA		
55.	SHALLAKI	Boswellia serrata	Pitta kapha hara poushtika, Atisara, arshas, kushta ,rakta pitta vrana
56.	ARIMEDA	Acacia farnesiana	Kapha vata shamaka, pachana, Kushta, kandu, shodha, prameha ,kasa, vrana, mukha danta roga
57.	KATPHALA	Myrica nagi	Vata kapjha hara, veedana sthapana Sukra shodhana, sandhaneeya Aruchi, jwara, udara, raktapitta, swasa, kasa, pratishaya, kandu,arshas

Table 4

58.	DHANVANA	Grewia tiliafolia	Kapha pitta hara, bhrimhana, balya Vrana ropana, Atisara , pravika, rakta pitta, vrana, kasa,.
59.	KACHURA	Hedychium spicatum	Kapha vata hara, hgrahi, Kasa, swasa, pratishayahikka, shoola, jwara
60.	JAPA PUSHPA	Hibiscus rosa sinensis	Vata kapha hara samgrahini, keshya, hridya Pradara, p[rameha, jwara
61.	AVARTAKI (HEMA PUSHPI)	Cassia auriculata	Kaphapitta hara, varnya Prameha, visha, raktatisara
62.	KUMARI	Aloe vera	Kapha vata hara, bhrimhana, balya, vrishya. visha hara Gulma, pleeha, yakrit vrudhi, jwara, agnidagdha, visphota, raktapitta, twak roga
63.	KAMBHOJI (Masha parni)	Teramnus labialis	Vata pitta hara, sukrala, kapha kara, grahi, Shodha, jwara, rakta vikara
64.	YUTHIKA	Jasminium auriculatum	Kapha vata kara , pitta hara, varnya, hridya, vishaghna Vrana, rakta, mukha danta , akshi roga
65.	KUBJAKA	Rosa moschata	Tridosha hara, vrishya, saraka, Daha, netra roga
66.	VERATARU	Dichrostachys cinerea	Vata kapha hara Mutra ghata, asmari. yoni shoola, mutra krichra
67.	KETAKI	Pandanus tectorius	Kapha hara, chakshushya, hridya Dourgandhya hara Jwara, siro shoola, amavata
68.	MATSYAADANI	Picrorhiza kurroa	Kapha piyyta hara, bhedhana, deepana, Jwara, prameha, swasa, kasa ,daha, kushta, krimi
69.	PINDITAKA	Randia dumatorium	Kapha hara, vamaka, lekhana, Vidrathi, pratishaya, vrana, kushta, anaha, shodha, gulma, vrana

Table 4

70.	PUTRANJEEVA	Putranjeeva roxbhurgianum	Kapha vata hara, vrishya, garbhada,mutrала Jwara, praatishaya, sira shoola
71.	SHALA	Shorea robusta	Kapha hara, Vrana, sweda hara, krimi, vidradhi, bhadirya, yonikarna roga
72.	SARJA	Vateria indica	Kapha hara Pandu, meha, kushta, visha, vrana
73.	PADMINI	Nelumbo species	Kapha pitta hara, daha prashamana, hridya, balya, rakta samgrahaka, mutrала,grahi, mutra virajaneeya
74.	PADMA	„	
75.	PUNDAREEKA	„	
76.	KOKANADA	Kamala (Red)	
77.	SOUGANDHIKA	? Sulphur	Deepana, pachana, vishghna Rasayana, dadru, kushta, visarpa, krimi, pleeha vrudhi
78.	INDEE VARA	Kamala (Blue)	Kapha pitta hara, daha prashamana, hridya, balya, rakta samgrahaka, mutrала,grahi, mutra virajaneeya
79.	KINJALKA	Kamala kesara (Nelumbo speciosum)	Kapha pitta hara, vrishya, grahi Trishna, daha, raktarshas, visha, shodha.
80.	ASANA	Pterocarpus marsupium	Kapha pityta hara, twachya, keshya, rasayana Kushta, visarpa, switra, meha, krimi
81.	PRAPUNDARIKA	Sweta kamala ?cassia absus	Kapha pitta hara, netrya, varnya, sukrала
82.	PADMAKA	Prunus puddum	Kapha pitta hara, garbha samsthapana, ruchya Visarpa, daha, visphota , kushta,chardi, vrana, trishna

Table 4

83.	SOURASHTRIKA	Double sulphate of potassium and aluminum	Vrana ropana, grahi, lekhaana, keshya , danta dardhyakara, vishahara, rakta sthambaka Switra , visarpa, raktapitta, vishama jwara, kandu, netra roga, mukha roga
84.	KHATIKA		Pitta kapha hara, grahi, Daha vrana, rakta srava, netra roga
85.	ABHRAKA	Mica	Vata pitta hara, rasayana, medhya, balya, deepana Prameha, hridroga, jwara, vata roga dristi mandya
86.	BHOORJA PATRA	Betula utilis	Tridosha hara, medo hara, vishaghna Apasmara, unmada, raktapitta, vrana
87.	SREEVESHTAKA	Sarala niryasa Oleo-resin of Pinus longifolia	Pittakara, vata kapha hara. saraka, rakshoghna, Siro ,akshi, swara, roga hara, sweda dougandhya, kandu, vrana
88.	SHALMALI	Bombax ceiba	Kapha vrudhi, pitta vata hara, rasayana, vrishya Raktapitta, grahani, pravahika,
89.	SHALMALI NIRYAS	Oloe resin of Bombax ceiba	Pravahika, atisara, rakta vikara
90.	RAJITHA	Silver	Vata kapha hara, saraka, lekhaana, deepana. balya, medhya,
91.	TAMRA	Copper	Pitta kapha hara, lekhaana, kushtaghna Nertrya Kushta, krimi, sthouly, arshas, kshaya, pandu, srama
92.	RASANJANA	Yellow oxide of Mercury	Vata pitta hara, vishaghna Mukha roga, swasa, hidma
93.	SOUVEERANJANA	Stybnitis	Pitta hara, vishaghna, Hidma, akshi roga Vrana shodhana, ropana

Table 4

94.	SROTHANJANA	Antimony sulphide	Kapha piotta hara, lekhaana, netrya, Hidma, visha, chardi, rakat vikara
95.	PUSHPANJANA	Zinc oxide	Sarva akshi roga, visha jwara
96.	NEELANJANA	Lead sulphide	Tridosha hara, netrya, rasayana
97.	GAIRIKA	Ochre	Pitta hara, netrya, vishaghna Chardi, hidma, rakta vikara
98.	SINDHURA		Tridosha hara, netrya, bhedana
99.	KASISA		Vata kapha hara, keshya, rasayana, netrya, visha, vrana, kshaya, switra
100.	PUSHPA KASISA		
101.	MAKSHIKA	Copper pyrite Iron pyrite Arsano pyrite	Vrishya, rasayana,
102.	SAMUDRA PHENA	Sepia officinalis (cuttle fish bone)	Kapha Pitta hara, vishaghna, karna roga hara, lekhaana,
103.	PASHANA BHEDI	Saxifra ligulata	Vasti shodhana, bhedana, arshas, gulma, asmari, yoni rogaa, pleeha Shoola,
104.	SANKHA	Turbinella rappa	Kapha vata hara, deepana, pachana, grahi Gahani, netra roga, amlapitta, parinama shoola, yavani pidika
105.	VATSA NABHI	Aconitum ferox	Vata kapha hara, rasayana, sweedala, vishaghna, Jwara, kushta, madhu meha, agnimandya, swasa, kasa, sannipata jwara, pleehodara, apachi, shodha
106.	PARADA	Mercury	Tridosha hara, rasayana, balya, vrishya, yoga vahi, Kushta, grahani, atisara, agnimandya, kshaya

CHARAKA'S MAHA KASHAYA DASHAIMANI

(THERAPEUTIC CLASSIFICATION OF DRUGS)

S.NO.	NAME OF THE DASHAIMANI	ACTION	Names Of The Plants
1.	JEEVANEEYA	VITILIZER	Jeevaka, Rushabhaka, Meda, Maha Meda, Kakoli, Ksheera Kakoli, Mudga Parni, Masha Parni, Jeevanthi, Madhuka.
2.	BRUMHANEYA	BULK PROMOTING	Ksheerini, Rajashavaka, Avagandha, Kakolee, Ksheera Kakoli, Vaatayani, Bhadrudani, Bhaardwaaja, Payasyaa, Rushya Gandha.
3.	LEKHANEYA	EMACIATING	Musta, Kushta, Haridra, Daru Haridra, Vachaa, Ativisha, Katurohine, Chithraka, Chira Bilwa, Himavathee.
4.	BHEDHENEYA	MASS BREAKING	Suvahaa,, Arka, Urubooka, Agni Mukhi, Chitra, Chitrka, Chirabilwa,, Sankhini, Sakuladeena, Swarna- Kshrerine.
5.	SANDHANEYA	HEALING	Madhuka, Madhuparni, Prisna Parni, Ambastakee, Samanga, Mocharasa, Dhatake, Lodhra, P[Riyangu, Katphala.
6.	DEEPANEYA	APPETISER	Pippali, Pippali Moola, Chaya, Chitraka, Nagara, Maricha, Ajamoda, Hingu, Bhallataka, Amla Vetasa.
7.	BALYA	TONIC	Indree, Rushabhio, Athirasa, Rushya Proktha, Payasyaa, Aaswagandha, Sthira, Rohinee, Balaa, Atibala.
8.	VARNYA	COMPLEXION PROMOTING	Chandana, Padmaka, Tunga, Useera, Manjista, Saribaa, Payasyaa, Sithaa, Latha, Madhuka.
9.	KANTHYA	BENEFICIAL FOR THROAT	Saribaa, Ikshumoola, Madhuka, Pippali, Draksha, Vidaare, Kaidarya, Hamsapadi, Brihati, Kantakarika.
10.	HRDYA	CARDIAC TONIC	Aamra, Amraataka, Lakucha, Karamarda, Vrukshamla, Amlavetasa, Kuvala, Badara, Dadima, Maatulunga.
11.	THRUPTHIGNA	ANTI SATURATIVE	Naagra, Chavya, Chitraka, Vidanga, Moorva, Guduchi, Vacha, Mustha, Pippali, Patola.
12.	ARSHOGNA	ANTI HAEMMORHOIDAL	Kutaja, Bilwa, Chitraka, Nagara, Athivisha, Abhaya, Dhanvayavasaka, Daruharidra, Vaca, Chavya.

Table 5

S.NO.	NAME OF THE DASHAIMANI.	ACTION	Names Of The Plants
13.	KUSTAGHNA	ANTI DERMATOSIS	Khadira, Abhaya, Amalaki, Hatidra, Arushkara, Sapthaparna, Aragvadha, Karaveera, Vidanga, Jaathe.
14.	KANDUGHNA	ANTI PRURITIC	Chandana, Nalada, Kruthamalajka, Naktha Mala, Nimba, Kutaja, Sarshapa, Madhuka, Daruharidra, Mushtha.
15.	KRIMIGHNA	ANTHELMINTIC	Aksheeva, Maricha, Gandeera, Kebuka, Vidanga, Nirgundee, Kinkhee, Swadamstraa, Vrusha Parnika, Aakhuparnika.
16.	VISHAGNA	ANTI POISION	Haridra, Manjista, Suvaha, Sookshma Ela, Palindee, Chandana, Kathaka, Sireesha, Sindhuvara, Sleshmataka.
17.	STHNYA JANANA	GALACTOGOUGE	Veerana, Saali, Shastika, Ikshuvalika, Darbha, Kusa, Kasa, Gundra, Itkata, Kathuranmoola.
18.	STHNYA SHODHANA	GALACTO DEPURATIVE	Paatha, Mahaushadha, Suradaru, Musthaa, Moorva, Guduchi, Vatsaka Phala, Kirathatiktha, Katukarohini, Saariva.
19.	SUKRA JANANA	PROMOTING REPRODUCTIVE TISSUE	Jeevaka, Rushabhaka, Kakolee, Ksheera Kakoli, Mudga Parni, Masha Parni, Meda, Vrudhaaruhaa, Jatila, Kalinga.
20.	SUKRA SHODHAKA	TISUE DEPURANT	Kushta, Elavaluka, Katphala, Samudra Phena, Kadamba Niryasa, Ikshu, Kandeekshu, Iskhuraka, Vasuka, Useera.
21.	SNEHOPAGA	SUB OLEATIVE	Mrudweeka, Madhuka, Madhuparnee, Medaa, Maha Medaa, Vidaree, Ksheerakakoli, Jeevaka, Jeevanthi, Saalparnee.
22.	SWEDOPAGA	SUB DIA PHORETIC	Shobhanjana, Eranda, Arkka, Vrucheera, Punarnava, Yava, Thila, Kulatha, Maasha, Badara.
23.	VAMANOPAGA	SUB EMETIC	Madhu, Madhuka, Kovidara, Karbudara, Neepa, Vidula, Bimbee, Sanapushpee, Sadapushpee, Prathyak Pushpee.
24.	VIRECHANOPAGA	SUB PURGATIVE	Drakshaa, Kasmeera, Parooshka, Abhayaa, Aamalaka, Vibheetaki, Kuvala, Badara, Karkandu, Peelu.
25.	ASTHAPANOPAGA	SUB CORRECTIVE ENEMA	Thrivruth, Bilwa, Pippali, Kushta, Sarshapa, Vacha, Vatsakaphala, Sathapushpa, Madhuka, Madanaphala.

Table 5

S.NO.	NAME OF THE DASHAIMANI	ACTION	Names Of The Plants
26.	ANUVASANOPACA	SUB UNCTOUS ENEMA	Raasna, Suradaru, Bilwa, Madanaphala, Sathapushpa, Vrusheera, Punarnava, Swadamstraa, Agnimantani, Syonaaka.
27.	SIROVIRECHANOP-AGA	SUB ERRHINES	Jyothishmati, Kshavaka, Maricha, Pippali, Vidanga, Sigru, Sarshapa, Apamarga Thandula, Sweetha, Mahaswetha.
28.	CHARDI NIGRAHAN	ANTI EMETIC	Jamboo Pallva, Amra Pallva, Mathulunga, Dadimaa, Yava, Shastika, Useera, Mruth, Lajja.
29.	HIKKA NIGRAHANA	ANTI DYPsic	Nagara, Dhanvayaasaka, Mustha, Parpatata, Chandana, Kirathatiktha, Guduchi, Hreebera, Dhanyka, Patola.
30.	TRISHNA NIGRAHANA	ANTI HICCOUGH	Sati, Pushakara Moola, Badarabeeja, Kantakaarika, Brihati, Vruksharuhaa, Abhaya, Pippali, Duralabha, Kuleerashringi.
31.	PUREESHA SANDHANEEYA	INTESTINAL ASTRIGENTS	Priyangu Anata, Aamraasthi, Katwanga, Lodhra, Mocharasa, Samanga, Dhathakee-Pushpa, Padmaa, Padma.
32.	PUREESHA VIRAJANEEYA	FEACAL DEPIGMENTER	Jamboo Twak, Sallkaa Twak, Kacchura, Madhuka, Saalmale, Sreeveshtaka, Bhrishtamrutha, Payasyaa, Uthapal, Thila.
33.	MOOTRA SAMGRAHANEEYA	ANTI DIURETIC	Jambu, Aamra, Plksha, Vata, Kapeethana, Udambra, Aswatha, Bhallataka, Asmanthaka, Somavalkala.
34.	MUTRA VIRECHANEEYA	DIURETIC	Padma, Nalini, Saughandhika, Pundareeka, Sathapathra, Uthphala, Kumuda, Madhuka, Priyangu.
35.	MUTRA VIRAJANEEYA	URINARY DEPIGMENTER	Vrishadaanee, Swadamstra, Vasuka, Vaseera, Pashanabheda, Darbha, Kusa, Kaasa, Gundra, Ithakata.
36.	KASA HARA	ANTI TUSSIVES	Drakshaa, Abhaya, Aamalaka, Pippalli, Duralabha, Srungee, Kantakaarikaa, Vruscheera, Punarnava, Thamalaki.
37.	SWASA HRA	ANTI DYSPONEIC	Sati, Pushkarmoola, Amlavetasa, Ela, Hingu, Aguru, Surasa, Thaamalki, Jeevanthi, Chandana.
38.	JWARA HARA	ANTI PYRETIC	Sariba, Sarkara, Pathaa, Manjista, Draksha, Peelu, Parooshaka, Abhaya, Aamalaka, Vibhetaki.

Table 5

S.NO.	NAME OF THE DASHAIMANI	ACTION	Names Of The Plants
39.	SRAMA HARA	ENERGY COMPOSETOR	Draksha, Khajoor, Priyala, Badara, Dadima, Phalgu, Parooshaka, Ikshu, Yava, Acopic Shastika.
40.	SWAYADHU HARA	ANTI PHLOGISTIC	Paatala, Agnimantha, Syonaka, Bilwa, Kaasmarya, Kantakarika, Brihati, Saalparne, Prisanaparni, Gokshura.
41.	DAHA PRAMASANA	REFRIGERANT	Lajja, Chandana, Kaasmarya, Madhuka, Sarkkara, Uthpala, Useera, Saariva, Guduchi, Hreebera.
42.	SEETHA PRASAMANA	CALEFACIENT	Thagara, Aguru, Dhanyaka, Srungavera, Bhootheka, Vachaa, Kantakari, Agnimantha, Syonaka, Pippali.
43.	UDARDA PRASAMAN	ANTI ALLERGIC	Tinduka, Priyala, Badara, Khadira, Kadara, Arimeda, Sapthaparna, Awsakarna, Arjun, Asana.
44.	ANGA MARDHA PRASAMANA	ANTI BODYACHE	Vidarigandha, Prushniparni, Brihati, Kanta Karika, Eranda, Kaakolee, Chandana, Useera, Elaa, Asoka.
45.	SOOLA PRASAMANA	ANTI SPASMODIC	Pippali, Pippalimoola, Chavya, Chitraka, Srungaveera, Maricha, Ajamoda, Ajagandha, Ajaji, Gandeera.
46.	SONITHA PRASAMAN	HAEMOSTATIC	Madhu, Madhuka, Rudhira, Mocharasa, Mruthkapala, Lodhra, Gairika, Priyangu, Sarkkar, Lajja.
47.	VEEDANA STHAPAN	ANALGESIC	Saala, Katphala, Kadamba, Padmaka, Thumba, Mocharasa, Sireesha, Vanjjula, Elavaluka, Asoka.
48.	SAMGNA STHAPANA	RESUCIATIVE	Hingu, Kaidarya, Arimeda, Vacha, Choraka, Vayahrutha, Golomee, Jatila, Palankasha, Asokarohine.
49.	PRAJA STHAPANA	ANTI ABORTIFICIENT	Aindree, Bramhee, Sathavari, Sahasraveerya, Amogha, Avyatha, Sivaa, Arishta, Vatya, Pushpee, Vishwaksenakanthaa.
50.	VAYAH STHAPANA	REGULATING AGING PROCESS	Amrutha, Abhaya, Dhathree, Yuktha, Swetha, Jeevanthi, Athirasa, Mandookaparni, Sthira, Punarnava.

GANOUSHADHA VARGA

Amla Panchaka- (I) Kola, Dadima, Vrikshamla, Chukrika, Amlavetasa.

Amla Panchaka (II) - Beejapuraka, Jambeera, Naranga, Amlavetasa,

Anjana Trayam -Pushpanjanam, Kala Anjanam, Rasaaanjanam,

Ashtadhatu - Swarna, Rajata, Kamsya, Seesam, Tamra, Vanga, Loha, Parada

Ashtagandha- Karpura, Chandana, Musta, Kumkuma (Saffron), Devadaru, Gorochana, Kesari, Useera

Ashta Kshara- Palasa, Mushaka, Apamarga, Tilanalakshara, Yava Kshara, Sarja Kshara, Arka, Snuhi.

Ashtavarga- Jeevaka, Rushabhaka, Meda, Mahameda, Kakoli, Ksheera Kakoli, Vriddhi, Buddhi.

Abhaya Pratinidhi Dravayas

Medha----- Aswagandha

Mahameda-----Scribal

Jeevaka, Rushabhaka-----Guduchi, Vamsalocvhana

Buddhi-----Bala

Vriddhi----- Mahabala

Upavisha Trayam- Nirvisha, Ativisha, Langali

Upavisha Saptaka- Arka Ksheeram, Snuhi Ksheeram, Langali, Karaveeraka, Gunja, Ahiphena, Dattura

Kantaka Trayam-Dushsparsha, Brihati, Agnidamana.

Kantaka Trayam (II) Sunthi, Guduchi, Dushsparsha

Kantakari Trayam- Gokshura, *Vakudu*, Mulaka

Chaturjataka- Twak, Ela, Dalchini, Nagakesara

Katu Chaturjataka- Ela, Twak, Patram, Maricha

Chaturshanas -Shunti, Pippali, Maricha, Pippalimoola

Chaturbeeja -Methika, Chandrasoora, Kalajaji, Yavanika,

Chaturbhradaka- Sunthi, Ativisha, Musta, Guduchi,

Chaturgranthi- Sunthi, Lasuna, Ardraka, Pippalimoola,

Chatusama- Jatifala, Lavanga, Jeeraka, Tankanakshara,

Triksharas - Sajjikshara, Yavakshara, Tankanakshara.

Trikatu - Sunthi Pippali, Maricha.

Trikatuushanas- Pippali, Pippalimoola, Sunthi

Trikarshikas- Sunthi, Ativisha, Musta.

Trijatakas- Ela, Lavanga, Dalchini (Twak)

Triphala - Hareetaki, Bibhitaki, Amalaki.

Madhuratriphalas- Draksha, Kashmarya, Kharjura.

Sugandha Triphala- Jayaphala, Ela, Lavanga.

Trimadhura- Ghuta, Guda, Madhu.

Tirsama- Hareetaki, Sunthi, Guda.

Trisugandha- Twak, Patra, Ela.

Trisarkara- Sugar From Sugarcane, Sugar From Madhu, And Seeta.

Dasakshara- Sheegru, Moolaka, Chinch, Chitraka, Ardraka, Nimba, Ikshu, Apamarga, Kadali, Palasa

Dasamootras- Hasthi, Mahisha, Unstra, Go, Aja, Avika, Ashwa, Khara, Purusha, Stree.

Dasamoolas- Bilva, Agnimantha, Shyonaka, Patala, Kashmari, Shaliparni, Prushniparni, Brihati, Kantakari, Gokshura.

Dashangadhoopa- Madhu, Musta, Ghrita, Gandha, Guggulu, Agaru, Shilajit, Devadaru, Silhaka.

Navadhatus- Swarna, Rajata, Tamra, Naga, Vanga, Teekshna Loha, Kanthaloha, Kamsya.

Navaratna- Manikya, Amukta, Vidruma, Tarkshya, Pushparaga, Neela, Gomedita, Vaidurya, Vajra.

Panchakolas- Pippali, Pippalimoola, Chavya, Chitraka, Nagara.

- Panchakolas (2)-** Hareetaki, Ajamoda, Souvarchalalavana, Maricha, Sunthi.
- Panchaksharas-** Palasha, Moolaka, Yavakshara, Souvarchika, Tilanala.
- Panchaganas-** Prushniparni, Brihati, Kantakari, Veedari, Gokshura.
- Panchagavya-** Gomootra, Gomaya, Goksheera, Godadhi, Goghrita..
- Panchatwaka-** Vata, Mahavata, Udumbara, Vetasa, Ashwattha,
- Panchatwaka-** Nyagrodha, Udumbara, Ashwttha, Parishha, Plava.
- Panchapallava-** Amra, Jambu, Kapittha, Beejapuraka, Bilva.
- Panchapllava-** Vata, Ashwattha, Pareesha, Jamboo, Udumbara.
- Panchapittas-** Varaha, Aja, Mahisha, Matsya, Mayura
- Panchabeējas-** Sarshapa, Ahiphena, Ajamoda, Jeeraka, Yavani.
- PanchaMahavishas-** Gauripashana, Talaka, Manaasheela, Vatsanabhha, Naja. (Sarpavisha).
- PanchaMahisha-** Mahishamaya, Mootra, Ksheera, Dadhi, Ghrita.
- Laghu Panchamoola-** Shaliparni, Prushniparni, Brihathi, Kantakari, Gokshura.
- Brihatpanchmopolas-** Bilva, Agnimantha, Shyonaka, Patala, Kashmari.
- Madhyampanchmoolas-** Mudgaparni, Mashaparni, Eranda, Punarnava, Bala.
- Balapanchmoolas-** Haridra, Guduchi, Punarnava, Vidarikanda, *Oddichettu*
- Jeevaka Panchamoola-** Jeevaka, Rushabhaka, Shatavari, (Small & Big) *Manubala*.
- Trinapanchmoola-** Kusha, Kasa, Darbha, Nala, Kandeekshuka
- Pancha Mootra-** Go, Aja, Avika, Mahisha, Khara.
- Pancharatna-** Kanakam, Hirakam, Nilam, Padmaragam, Mouktika,
- Panchlavana-** Saindhvam, Sarja, Bidala, Audbhid, Samudra.
- Panchasama-** Sunthi, Pippali, Sauvarchala, Hareetaki,
- Panchasama (Ii)-** Saindhava, Chitrakamoola, Hareetaki, Pippali, Amalaki.

Pancha Siddh Oushadh- Tailakanda, Sudhakanda, Kroudakanda, *Dirasena* Matsyakshi.

Panchasugandha- Kumkuma, Agar, Karpura, Kasturi, Chandana.

Panchasurana- Vanya & Gramya Surana, Mala Kanda,

Panchang- Patra, Pushpa, Kanda, Moola, Phala

Panchang (ii)- Sunthi, Daruharidra, Shigru Phala, Sarshapa, Bhringaraja.

Panchamrita- Go- Dugdha, Dadhi, Ghrita, Madhu, Sarkara,

Panchamrita (Medicinal)- Guduchi, Sunthi, Gokshura, Kalimushali, Shatavari

Panchustikanjikam- Shali, Yava, Chanaka, Kala, Kullattha.

Shad Rasa's- Madhura, Amla, Lavana, Katu, Tikta, Kashaya.

Shat Kshara-

Shat Sugandha- Jatiphala, Karpura, Lavanga, Sugandha Bala, Kankola, Kraramuka.

Shadganas- Pranakara- Sadhyocooked Meat & Rice (Hot), Rice With Milk, Coitus With Young Women, Drinking Ghritam, Hot Water Bath.

Pranahara- Spoiled Meat, Coitus With Aged Women, Sitting Opposite To Morning Sun, Tatuna Dadhi (New Curd), Coitus With Women In The Evening (Asurasandhya).
Early Morning Sleep.

Shad Ushana- Pippali, Pippalimoola, Chavya, Chitraka, Sunthi.

Uapvisha Saptakam-

Sapta dhatu-Rasa, Rakta, Mamsa, Meda, Asthi Majja, Shukra.

Sapta dhatu-(Loha, Or Dhatus) Swarna, Rajata., Tamra, Vanga Yashada, Loha, Naga.

Sapta uapadhatus-(Related To Shareera) Stanya, Rajas, Vasa, Sweda, Danta, Kasha, Ojas.

(Related To Dhatus)- Swarna Makshika, Tara Makshika, Tuttha, Kankushta, Rasaka, Sindoor, Lohakitta.

Shat Kwatha- Pachana. Shodhana, Kledana, Shamana, Deepana, Shoashana,

Sapta Santarpanas-Draksha, Dadima, Khurjura, Triturated With Sarkara Panaka, And Added With Laja, Ghrita, Madhu.

Sapta Uparatnas-Vaikranta, Suryakanta, Chandtrakanata, Karpura, Sphatika, Pheroja Kachamani.

DOSHA BHEDAS

TABLE 7

1. VRUDHA VATA, KAPHA PITTA SAMA
2. VRUDHA PITTA, KAPHA VATA SAMA
3. VRUDHA KAPHA, VATA PITTA SAMA
4. VRUDHA VATA KAPHA, PITTA SAMA
5. VRUDHA KAPHA PITTA, VATA SAMA
6. VRUDHA VATA PITTA, KAPHA SAMA
7. VRUDHA VATA, VRUDHATARA KAPHA SAMA PITTA
8. VRUDHA PITTA, VRUDHATARA KAPHA SAMA VATA
9. VRUDHA KAPHA, VRUDHATARA VATA. SAMA PITTA
10. VATA PITTA VRUDHATARA, KAPHA VRIDHI
11. VRUDHATARA KAPHA PITTA, VRUDHA VATA
12. VRUDHATARA KAPHA VATA, VRUDHA PITTA
13. VRUDHATARA VATA PITTA KAPHA

14. VATA PITTA ATI VRUDHI, KAPHA SAMA VRUDHI
15. VATA KAPHA ATI VRUDHI, PITTA SAMA VRUDHI
16. PITTA KAPHA ATI VRUDHI, VATA SAMA VRUDHI
17. VATA, KAPHA SAMA VRUDHI, PITTA ATI VRUDHI
18. VATA PITTA SAMA VRUDHI, KAPHA ATI VRUDHI
19. PITTA KAPHA SAMA VRUDHI, VATA ATI VRUDHI
20. VRUDHA VATA VRUDHA TARA PITTA VRUDHA TAMA KAPHA
21. VRUDHA VATA VRUDHA TARA KAPHA VRUDHA TAMA PITTA
22. VRUDHA PITTA VRUDHA TARA KAPHA VRUDHA TAMA VATA
23. VRUDHA PITTA VRUDHA TARA VATA VRUDHA TAMA KAPHA
24. VRUDHA KAPHA VRUDHA TARA VATA VRUDHA TAMA PITTA
25. VRUDHA KAPHA VRUDHA TARA PITTA VRUDHA TAMA VATA

TABLE 7

26. *KSHEENA VATA, KAPHA PITTA SAMA*
27. *KSHEENA PITTA, KAPHA VATA SAMA*
28. *KSHEENA KAPHA, VATA PITTA SAMA*
29. *KSHEENA VATA KAPHA, PITTA SAMA*
30. *KSHEENA KAPHA PITTA, VATA SAMA*
31. *KSHEENA VATA PITTA, KAPHA SAMA*
32. *KSHEENA VATA, KSHEENATARA KAPHA SAMA PITTA*
33. *KSHEENA PITTA, KSHEENATARA KAPHA SAMA VATA*
34. *KSHEENA KAPHA, KSHEENATARA VATA. SAMA PITTA*
35. *VATA PITTA KSHEENATARA, KAPHA VRIDHI*
36. *KSHEENATARA KAPHA PITTA, KSHEENA VATA*
37. *KSHEENATARA KAPHA VATA, KSHEENA PITTA*
38. *KSHEENATARA VATA PITTA KAPHA*

39. VATA PITTA *ATI KSHEENA*, KAPHA SAMA *KSHEENA*
40. VATA KAPHA *ATI KSHEENA*, PITTA SAMA *KSHEENA*
41. PITTA KAPHA *ATI KSHEENA*, VATA SAMA *KSHEENA*
42. VATA, KAPHA SAMA *KSHEENA*, PITTA *ATI KSHEENA*
43. VATA PITTA SAMA *KSHEENA*, KAPHA *ATI KSHEENA*
44. PITTA KAPHA SAMA *KSHEENA*, VATA *ATI KSHEENA*
45. *KSHEENA* VATA *KSHEENA* TARA PITTA *KSHEENA TAMA* KAPHA
46. *KSHEENA* VATA *KSHEENA* TARA KAPHA *KSHEENA TAMA* PITTA
47. *KSHEENA* PITTA *KSHEENA* TARA KAPHA *KSHEENA TAMA* VATA
48. *KSHEENA* PITTA *KSHEENA* TARA VATA *KSHEENA TAMA* KAPHA
49. *KSHEENA* KAPHA *KSHEENA* TARA VATA *KSHEENA TAMA* PITTA
50. *KSHEENA* KAPHA *KSHEENA* TARA PITTA *KSHEENA TAMA* VATA

51. VRUDHA VATA SAMĀ PITTA , KSHEENA KAPHA
52. VRUDHA VATA, SAMĀ KAPHA, KSHEENA PITTA
53. VRUDHA PITTA, SAMĀ VATA KSHEENA KAPHA
54. VRUDHA PITTA, SAMĀ KAPHA KSHEENA VATA
55. VRUDHA KAPHA, SAMĀ VATA KSHEENA PITTA
56. VRUDHA KAPHA, SAMĀ PITTA KSHEENA VATA
57. VATA KSHAYA , VRUDHA KAPHA PITTA
58. KSHEENA PITTA , VRUDHA KAPHA VATA
59. KSHEENA KAPHA , VRUDHA VATAPITTA
60. KSHEENA VATA PITTA VRUDHA KAPHA
61. KSHEENA VATA KAPHA, VRUDHA PITTA
62. KSHEENA PITTA KAPHA, VRUDHA VATA
63. SAMĀ VATA PITTA KAPHA

TABLE 8

PHYSICO CHEMICAL PROPERTIES OF THE MEDICINES LIKE TASTE ARE
CORRELATED TO CHEMICAL AND THERAPEUTIC PROPERTIES OF THE
TRADITIONAL MEDICINES.

S.No	RASA	GUNA (PROPERTIES)		
		Uttama BEST	Madhyama MEDIUM	Avara LEAST
1.	Rooksha (DRY)	Kashaya	Katu	Tikta
2.	Snigdha (VISCOUS)	Madhura	Amla	Lavana
3.	Usna (HOT)	Lavana	Amla	Katu
4.	Sheeta (COLD)	Kashaya	Madhura	Tikta
5.	Guru (HEAVY)	Madhura	Kashaya	Lavana
6.	Laghu (LIGHT)	Tikta	Katu	Amla

PHYSICO CHEMICAL PROPERTIES OF THE MEDICINES LIKE TASTE ARE USED TO TABLE 9
UNDERSTAND THE CHEMICAL AND THERAPEUTIC PROPERTIES OF THE MEDICINES. BUT
THE CHEMICAL PROPERTIES IN THE MODERN PROPERTIES NEEDS TO BE ESTABLISHED

S.No	RASA	GUNA (PROPERTIES)					
		Rooksha DRY	Snigdha VISCIOUS	Sheetha COLD	Usna HOT	Guru HEAV Y	Laghu LIGHT
1.	Madhura		*	*		*	
2.	Amla		*		*		*
3.	Lavana		*		*	*	
4.	Katu	*			*		*
5.	Tikta	*		*			*
6.	Kashaya	*		*		*	

The traditional philosophies always use PANCHABHUTAS as the basis

TABLE 10

Derivation Of Shadrasas From Pancha Maha Bhootas

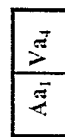
**Pitta, Childish,
Man, Red Giant (Astrological)
Tender leaf, Ovum**

RED COLORED



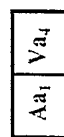
PRITHVI

KASHAYA RASA



AKASHA

TIKTA RASA

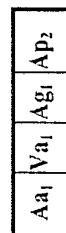


VAYU

AGNI

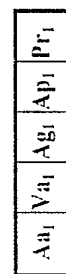
**Kapha, Young,
White Dwarf (Astrological)
Middle aged**

GREEN COLORED



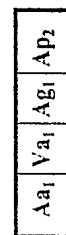
AP

LAVANA RASA



PRITHVI

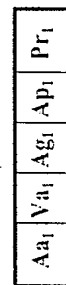
AMLA RASA



AP

**Vata, Old,
Black hole (Astrological)
Old aged, Sperm**

BLACK COLORED



PRITHVI

Table 11

GUNA (PHYSICAL PROPERTIES)						
S. NO.		AKASHA	VAYU	AGNI	JALA	PRITHVI
1	Laghu (<i>light</i>)	*	*	*		
2	Guru (<i>heavy</i>)					*
3	Seetha (<i>cold</i>)				*	
4	Usna (<i>hot</i>)					
5	Snigdha (<i>unctous</i>)				*	
6	Rooksha (<i>dry</i>)			*		*
7	Manda (<i>slow</i>)				*	*
8	Teekshna (<i>sharp</i>)			*		
9	Sthira (<i>inert</i>)					*
10	Sara (<i>mobile</i>)				*	
11	Mrudu (<i>soft</i>)	*			*	
12	Kathina (<i>rough</i>)					*
13	Vishada (<i>clear</i>)	*	*	*		
14	Picchila (<i>slimy</i>)				*	
15	Slakshna (<i>yeilding</i>)			*		
16	Khara (<i>rough</i>)		*			
17	Sookshma (<i>subtle</i>)	*	*	*		
18	Sthoola (<i>gross</i>)					*
19	Sandra (<i>dense</i>)					*
20	Drava (<i>fluid</i>)				*	
	Sushka		*	*		
	Vyavaee	*	*			
VEERYA(POTENCY)						
S. NO.		AKASHA	VAYU	AGNI	JALA	PRITHVI
1	Laghu (<i>light</i>)	*	*	*		
2	Guru (<i>heavy</i>)				*	*
3	Seetha (<i>cold</i>)				*	*
4	Usna (<i>hot</i>)			*		
5	Snigdha (<i>unctous</i>)				*	
6	Rooksha (<i>dry</i>)		*			
7	Manda (<i>slow</i>)	*				
8	Teekshna (<i>sharp</i>)			*		

Table 12

RASA (TASTE)						
S. NO.		AKASHA	VAYU	AGNI	JALA	PRITHVI
1	Madhura (Sweet)				*	*
2	Amla (Sour)			* •	*	•
3	Lavana (Salt)			* •	•	*
4	Tikta(Bitter)	*	*			
5	Katu (Pungent)		*	*		
6	Kashaya (Astringent)	*				*
* SUSRUTHA • CHARAKA						

MANASIKA DOSHA						
S. NO.		AKASHA	VAYU	AGNI	JALA	PRITHVI
1	Satwa	*				
2	Rajo		*			
3	Satwa+ Rajo			*		
4	Satwa+Tamo				*	
5	Tamo					*

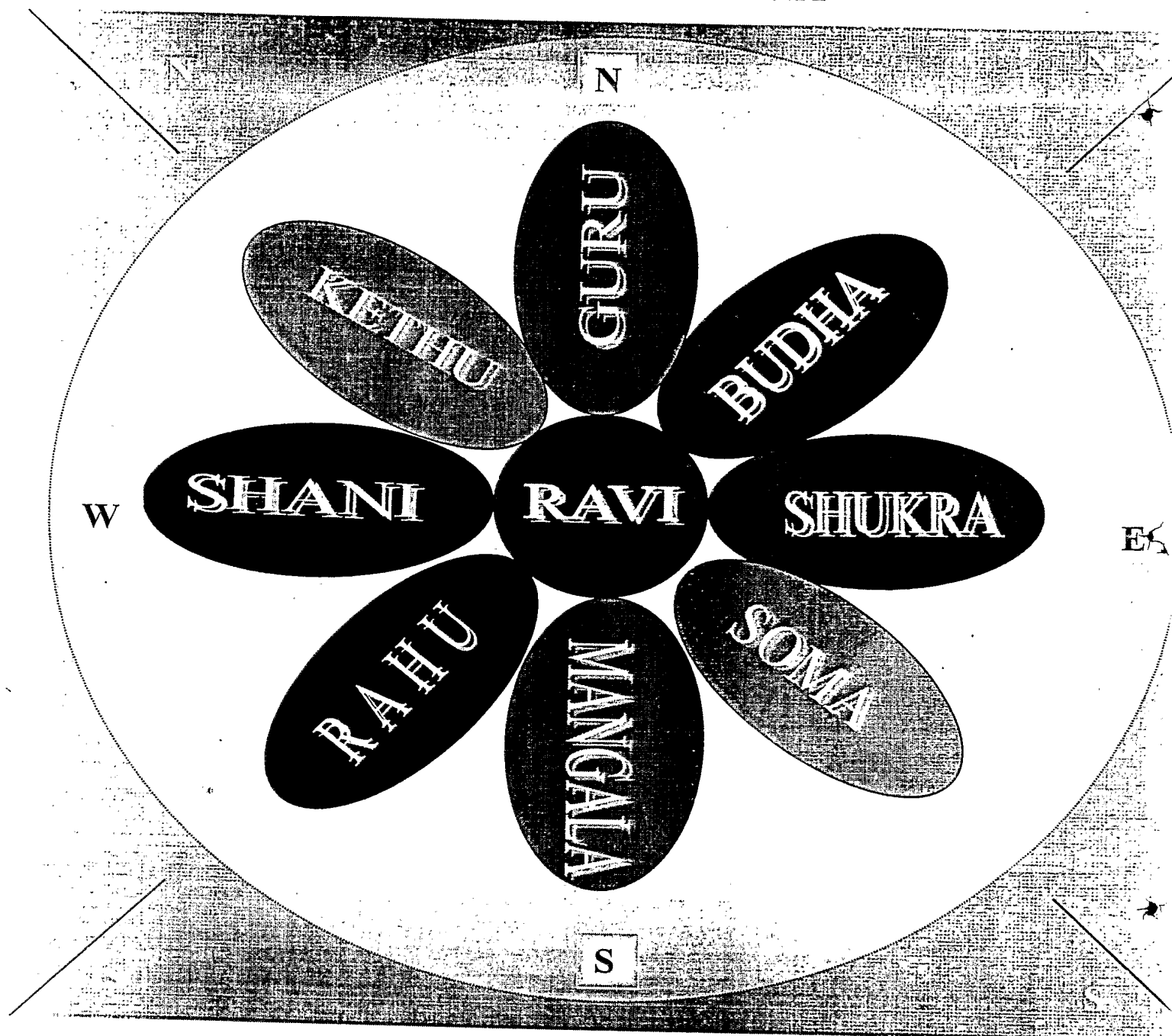
Table 13

S.NO.	ZODIAC SIGN	NAKSHTRA	PADA (CHARANA)	SANSKRIT NAME	BOTANICAL NAME
1.	ARIES	Aswini	1,2,3,4	Kupilu	<i>Strychnos nuxvomica</i>
		Bharani	1,2,3,4	Amalaki	<i>Embllica officinalis</i>
		Krithika	1	Oudumbara	<i>Ficus glomerulata</i>
2.	TAURUS	Krithika	2,3,4,	Oudumbara	<i>Ficus glomerulata</i>
		Rohini	1,2,3,4	Jambu	<i>Syzygium cumini</i>
		Mrigashira	1,2,	Khadira	<i>Acacia catechu</i>
3.	GEMINI	Mrigashira	3,4,	Khadira	<i>Acacia catechu</i>
		Arudra	1,2,3,4	Kasmari	<i>Gmelina arborea</i>
		Punarvasu	1,2,3	Vamsha	<i>Dendrocalamus strictus</i>
4.	CANCER	Punarvasu	4	Vamsha	<i>Dendrocalamus strictus</i>
		Pushya	1,2,3,4	Aswatha	<i>Ficus religiosa</i>
		Ashlesha	1,2,3,4	Nagakesara	<i>Mesua ferrea</i>
5.	LEO	Magha	1,2,3,4	Nyagrodha	<i>Ficus bengalensis</i>
		Pubba	1,2,3,4	Plaksha	<i>Butea monosperma</i>
		Uttara	1	Plaksha	<i>Ficus infectoria</i>
6.	VIRGO	Uttara	2,3,4	Plaksha	<i>Ficus infectoria</i>
		Hasta	1,2,3,4	Amrataka	<i>Spondias mangifera</i>
		Chitta	1,2	Bilwa	<i>Aegle marmelos</i>
7.	LIBRA	Chitta	3,4	Bilwa	<i>Aegle marmelos</i>
		Swathi	1,2,3,4	Arjuna	<i>Terminalia arjuna</i>
		Vishaka	1,2,3	Swadukantaka	<i>Flacourita indica</i>
8.	SCORPIO	Vishaka	4	Swadukantaka	<i>Flacourita indica</i>
		Anuradha	1,2,3,4	Bakula	<i>Mimusops elengi</i>
		Jesta	1,2,3,4	Shalmali	<i>Salmalia malabarica</i>
9.	SAGITTARIUS	Moola	1,2,3,4	Chandana	<i>Santalum album</i>
		Purvashada	1,2,3,4	Tinisa	<i>Ougenia dalbegioides</i>
		Uttarashada	1	panasa	<i>Artocarpus integrifolia</i>
10.	CAPRICON	Uttarashada	2,3,4,	Panasa	<i>Artocarpus integrifolia</i>
		Sravana	1,2,3,4	Arka	<i>Calotropis procera</i>
		Dhanishta	1,2,	Shami	<i>Acacia ferruginia</i>
11.	AQUARIUS	Dhanishta	3,4,	Shami	<i>Acacia ferruginia</i>
		Shatabhisha	1,2,3,4,	Kadamba	<i>Anthocephalus cadamba</i>
		Purvabhadra	1,2,3	Nimba	<i>Azadirachta indica</i>
12.	PISCES	Purvabhadra	4	Nimba	<i>Azadirachta indica</i>
		Uttarabhadra	1,2,3,4	Amra	<i>Mangifera indica</i>
		REVATHI	1,2,3,4	Madhuka	<i>Madhuka indica</i>

RASI VANA

S.NO.	ZODIAC SIGN	LORD (PLANET)	ELEMENT	SANSRIT NAME	BOTANICAL NAME
1.	ARIES	KUJA	AGNI	RAKTA CHANDANA	Pterocarpus santalinus
2.	TAURUS	SHUKRA	JALA	SAPTA PARNA	Alstonia scholaris
3.	GEMINI	BUDHA	PRITHVI	PANASA	Artocarpus longifolius
4.	CANCER	CHANDRA	JALA	PALASHA	Butea monosperma
5.	LEO	RAVI	AGNI	PATALA	Stereospermum chelenoides
6.	VIRGO	BUDHA	PRITHVI	AMRA	Mangifera indica
7.	LIBRA	SHUKRA	JALA	BAKULA	Mimusops elengi
8.	SCARPIO	KUJA	AGNI	KHADIRA	Acacia catechu
9.	SAGITTARIUS	GURU	AKASHA	ASWATHA	Ficus religiosa
10.	CAPRICORN	SHANI	VAYU	SHIMSHIPA	Dalbergia latifolia
11.	AQUARIUS	SHANI	VAYU	SHAMI	Acacia ferruginea
12.	PISCES	GURU	AKASHA	NYGRODHA	Ficus benghalensis

NAVAGRAHA VANA



- | | | |
|------------|---|------------------------|
| 1. RAVI | - | CALOTROPIS SPECIES |
| 2. SOMA | - | BUTEA MONOSPERMA |
| 3. MANGALA | - | ACACIA CATECHU |
| 4. BUDHA | - | ACHYRANTHES ASPERA |
| 5. GURU | - | FICUS RELIGIOSA |
| 6. SHUKRA | - | FICUS GLOMERATA |
| 7. SHANI | - | ACACIA FERRUGINA |
| 8. RAHU | - | CYNODON DACTYLON |
| 9. KETHU | - | DESMOSTACHYS BIPINNATA |

वक्त्रोपोत्पलनाल्लेन यद्योर्ध्वं जलमादेत् ।
तथा पवन संयुक्तः पार्श्वः पिबति पादपः ॥

Like the water drawn upwards by the tissue canals of the lotus, with the help of Air, the plants draw water through its roots

लेन तज्जलमादत्तं जरयत्याग्निं माकृतौ ।
आहारपरिणामाच्छेदोद्वाष्टिश्च जायते ॥

The plant prepares its food using Sun, water and air similar to the assimilation of food in a living being

वृक्षं गुल्मं बहुविदं तत्रैव तृणजातयः ।
तमसा धर्मरूपेण शब्दिलाः कर्म हेतुना ॥

The morphological features and classification of the plants
Indicates their efficacy similar to the diseased component

In the traditional philosophies the *diseases* are due to
vitiation (Imbalance) Of the Basic properties of *Tri Doshas*

TABLE 17

S.NO.	DISEASE	VITIATED DOSHA
1.	JWARA	-
2.	ARSHAS	VATAPITTA/KAPHA/TRIDOSHA
3.	VISARPA	TRIDOSHIA
4.	UNMADA	TRIDOSHIA
5.	APASMARA	TRIDOSHIA RAJO AND TAMO
6.	TRISHNA	TRIDOSHIA RAJO TAMO
7.	SHEETA PITTA	TRIDOSHIA PITTA PRADHANA
8.	UDARDA	TRIDOSHIA AND VATA PRADHANA
9.	MUTRA KRICHRA	TRIDOSHIA KAPHA PRADHANA
10.	ASMARI	TRIDOSHIA
11.	PRAMEHA	TRIDOSHIA
12.	SHODHA	TRIDOSHIA
13.	KUSHTA	TRIDOSHIAJA
14.	PANDU	TRIDOSHIAJA
15.	KAMALA	PITTA PRADHANA
16.	RAKTA PITTA	PITTA PRADHANA
17.	VATA RAKTA	PITTA AND RAKTA
18.	AMLAPITTA	PITTA AND RAKTA
19.	NEELIKA	PITTA
20.	KAKSHAYA	PITTA
21.	MEDO ROGA	KAPHA
22.	SWASA	KAPHA, VATA
23.	KASA	KAPHA VATA
24.	HIKKA	KAPHA, VATA
25.	GALAGANDA	KAPHA VATA
26.	ARDITHA	VATA
27.	VATA VYADHI	VATA
28.	PAKSHAGHATA	VATA
29.	EKANGA VATA	VATA
30.	GRIDRASI	VATA
31.	UDAVARTHA	VATA
32.	AKSHEPAKA	VATA

Table 18: Relation Of Humors, Properties, And Different Parts Of The Human Body – An Ayurvedic Approach

Sl.No	TRI DOSHA (Hara)	TRI MALAS	PANCHIA BHUTA (PHYSICAL PROPERTIES)	SAPTA DHATU S	CHEMICAL PROPERTIES	MAHABHUTA RELATIONS WITH DHATUS	EFFECT ON DOSHAS (DECREASING THE DOSHA) DUE TO DHATUS	RELATION ON GUNA	RELATION ON VIPAKA (POST ASSIMILATIVE EFFECT)
	Vata, Pitta, Kapha.	1.Purisha 2.Mutra 3.Sweda	1.Prithivi 2.Ap 3.Teja 4.Vayu 5.Akasha	1.Rasa 2.Rakta 3.Mamsa 4.Medasa 5.Asthi 6.Majja 7.Shukra	1.Rasa (Shadruchi's) a.Madhura b.Amla c.Lavana d.Katu e.Tikta f.Kashaya 2.Guna:- Broadly classified into 3 groups 1.Vaisheshik2.Samanya3.Atma Mostly used are: Guru (Heavy) Laghu (Light) Sheeta (Cold) Ushna (Hot) Snigdha (Soft, Lubricated,Supple) Rooksha (Dry) Manda (Slow) Teekshna (Sharp) 3.Veerya -2 4.Vipaka-3 5.Prabhava- innumerable	a. Prithivi+Ap b.Agni + Prithive c.Jala+Agni d.Aksha+Vayu e.Agni+Vayu f.Prithive+Vayu	a.Pitta Vata Hara b.Vata Hara c.Vata Hara d.Kapha Hara e.Kapha Pitta Hara f.Kapha Pitta Hara	a.Guru,Sheeta,Snigdha b.Ushna,Laghu,Snigdha c.Ushna,Laghu,Snigdha d.Ushna,Laghu,Ruksha e. Sheeta,Laghu,Ruksha f. Sheeta,Guru,Ruksha	a.Madhura b.Amla c.Madhura d.Katu e. Katu f. Katu

Table ,
PROPERTIES OF THE DRUGS USED FOR VRANA SHODHANA AND ROP PROPERTIES OF THE
DRUGS USED FOR VRANA SHODHANA AND ROPANA

S.NO.	SANSKRIT NAME	BOTANICAL NAME	FAMILY NAME	GUNA (PROPERTIES)				DOSHA KARMA	DRAVYA PRAVAGARHA VYADHI
				Guna	Rasa	Veerya	Vipaka		
1.	T r i p h a l i a	Amalaki	Phyllanthus emblica	Sara	All six Rasas		Madhura	Kapha Pita hara, Chakrusya, Deepana, Ruchya	Meha, Kushta, Vishamajwara nashaka (Bp. Harrehakya/42)
	Hareethaki	Terminalia chebula	Combretaceae						
	Vibheethaki	Terminalia bellerica	Combretaceae						
2.	Apamarga	Acleranthus aspera	Amaranthaceae	Laghu, Rookshna Teekshna	Katu, Tikta	Ushna	Katu	Kapha Vata hara Deepana Pachana Shiro- virechana	Shoola, Adhmana, Chardi, arsas, Udara, Vishoochika, Krimi, Kandu, Sadyovrana
3.	Guggulu	Commiphora mukul	Burseraceae	Sookshma, Sara, Pichchila, Laghu, Rooksha	Tikta, Kasha ya	Ushna	Katu	Kapha Vata hara, Rasayana, Balya, Bhagna sandhana	Amavata, Vrana, Apachi, Meha, Kusta, Grandhi, Shopha, Ganda mala, Krimi

**PROPERTIES OF THE DRUGS USED FOR VRANA SHODHANA AND ROP PROPERTIES OF THE
DRUGS USED FOR VRANA SHODHANA AND ROPANA**

S.NO.	SANSKRIT NAME	BOTANICAL NAME	FAMILY NAME	GUNA (PROPERTIES)				DOSHA KARMA	Dravya Prayogarha Vyadhi
				Guna	Rasa	Veerya	Vipaka		
4.	Bhallathaka	<i>Semecarpus anacardium</i>	Anacardiaceae	Teekshna, Laghu, Snigdha	Madhura, Kashaya	Ushua	Madhura	Kapha Vata hara, Chedana, Bhedhana, Medhya, Vata Pitta hara (Majja)	Vrana, Udara, Kusta, Arshas, Grahani, Gulma, Shopha, Anaha, Jwara, Krimi
5.	Karanja	<i>Pongamia pinnata</i>	Fabaceae	Laghu, Teekshna	Tikta, Katu, Kashaya	Ushua	Katu	Kapha Vata hara Deepana Pachana Krimigna	Arsas, kusta, Prameha Visarpa, Gulma Dusta Vrana Krimi, Unmada
6.	Karaveera	<i>Nerium indicum</i>	Apocynaceae	Laghu, Rooksha Teekshna	Katu Tikta	Ushua	Katu	Kapha Vata hara Kustghna Vrana shodhana Vrana ropana	Kusta, Krimi Kandu, Asmari Dusta Vrana Upadamsa Palithya Nethra kopa
7.	Kanchanara	<i>Bauhinia racemosa</i>	Caesalpinaceae	Laghu Rooksha	Kashaya	Sheeta	Katu	Kapha pitta hara Grahi Muthrala Deepana Vrana ropana	Raktapitta Raktapradara Kusta, Krimi Gandamala Vrana, Masurika
8.	Kumari	<i>Aloe barbadens</i>	Liliaceae	Guru Snigdha Pichhila	Tikta	Sheeta	Katu	Kapha Vata hara Bhedana, Rasayana Brimhana Balya, Vrishya	Yakrith vridhhi Pleeha vridhhi Gulma, Kusta Shoola Vibhanda

Table
**PROPERTIES OF THE DRUGS USED FOR VRANA SHODHANA AND ROP PROPERTIES OF THE
DRUGS USED FOR VRANA SHODHANA AND ROPANA**

10.	Haridra	<i>Curcuma longa</i> Linn.	Zingiberaceae	Laghu Rooksha	Katu, Tikta	Ushna	Katu	Vata Kapha hara	Varnya, Lekhana, Vishghna Prameha, Kushta, Kandu, Krimi, Aruchi, Vrana, Kamala, Pandu.
11.	Nimba	<i>Azadirachta indica</i>	Meliaceae	Laghu, Grahi,	Tikta	Sheetha	katu	Pitta Kapha hara Ahridya	Shrama, Thrishna, Kasa, Jwara, aruchi, Krimi, Vrana, Chardi, Prameha, Hrillasa (BP. Gudachyaadi/89-92)

LEKHANEYYA DRAVYAS (I)

S.N O.	SANSKRIT NAME (CHARAKA)	BOTANICAL NAME	FAMILY NAME	PART USED	GUNA (PROPERTIES)				DOSHA KARMA	DRAVYA PRAYOGARHA VYADHI
					Guna	Rasa	Veerya	Vipaka		
1.	Chitraka	<i>Plumbago zelanica</i>	Plumbaginaceae	Root Bark	Laghu, Ruksaha, Ushna,	Katu	Ushna	Katu	Vata Kapha hara, Deepana,Gr ahi,Pachana,	Grahani, Kushtha, Sotha, Arsa, Krimi, Kasa,
2.	Nagara	<i>Cyperus rotundus</i>	Cyperaceae	Rhizome	Sita, Grahi,	Katu, Kashaya	Seeta		Kapha Pitta hara, Deepana, Pachana,Gr ahi,	Trishna ,Jwara ,Aruchi, Janthuhara,
3.	Kushta	<i>Sassurea lappa</i>	Compositae	Rhizome	Laghu, Ushna,	Katu, Tikta	Ushna	Katu	Vata Pitta hara, Kapha hara, Sukrala,	Vata Rakta , Visarpa , Kasa, Kushta
4.	Haridra	<i>Curcum longa</i>	Zinziberaceae	Rhizome	Laghu, Rooksha, Ushna	Katu, Tikta	Ushna	Katu	Kapha Pittahara, Varnya,	Twak Dosha , Meha , Sotha, pandu,
5.	Daru Haridra	<i>Berberis aristata</i>	Berberidaceae	Rhizome	Laghu, Rooksha, Ushna	Katu, Tikta	Ushna	Katu	Kapha Pittahara, Varnya,	Twak Dosha , Meha , Sotha, pandu,Netra Karna roga.

LEKHANEYA DRAVYAS (2)

S.N O.	SANSKRIT NAME	BOTANICAL NAME	FAMILY NAME	PART USED	GUNA (PROPERTIES)				DOSHA KARMA	Dravya Prayoga Viyadhi
					Guna	Rasa	Veerya	Vipaka		
6.	Vacha	Acorus Calamus	Araceae	Rhizome	Ushna, Guna	Katu, Tikta	Ushna	Katu	Vatahara, Kaphahara Vanthrit,	Apasmara, Ummada, Soola, Vibanda, Admana
7.	Ativisha	<i>Aconitum heterophyllum</i>	Ranunculaceae	Rhizome	Ushna	Katu, Tikta,	Ushna		Kapha Pittahara, Deepana Pachana,	Atisara, Visha, Kasa, Krimi
8.	Katurohini	<i>Andrographis paniculata</i>	Scrophulariaceae	Rhizome	Rooksha, Seeta, Laghu,	Tikta	Seeta	Katu	Kapha Pitta Hara, Bedana, Deepan	Jwara, Prameha, Swasa Kasa, Daha, Kushta, Krimi
9.	Chirabliwa	<i>Holoptelia integrifolia</i>	Ulmaceae	Patra	Ushna,	Tikta, Kashaya	Ushna	Katu	Pittahara, Stambana,	Vamanahara, Arsa, Krimi, Kushta, Prameha
10.	Himavathce	Acorus Calamus	Araceae	Rhizome	Ushna,	Katu, Tikta	Ushna	Katu	Vatahara, Kaphahara Vanthrit,	Apasmara, Ummada, Soola, Vibanda, Admana

DEEPANEYYA DRAVYAS (I)

Sl.NO	SANSKRIT NAME (CHARAKA)	BOTANICAL NAME	FAMILY NAME	PART USED	GUNA (PROPERTIES)				DOSHA KARMA	DRAVYA PRAYOGARHA VYADHI
					Guna	Rasa	Veerya	Vipaka		
1.	Maricha	<i>Piper nigrum</i>	Piperaceae	Fruit	Ruksha Ushna Teekshna	Katu	Ushna	Katu	Kapha Vata hara, Pittakara,	Swasa, Shoola, Krimi,
2.	Pippali	<i>Pippali longum</i>	Piperaceae	Fruit	Anushna, snigdha, laghu,	Katu	Anushna	Madhu ra	Vata Kapha hara, Rsayana Rechana,	Swasa, Kasa, Udara, Jwara, Kushta, Prameha, Gulma
3.	Bhallathaka	<i>Semecarpus anacardium</i>	Anacardiaceae	Seeds	Teekshna, Laghu, Snigdha	Madhura, Kashaya	Ushna	Madhu ra	Kapha Vata hara, Chedana, Bhedhana, Medhya, Vata Pitta hara (Majja)	Vrana, Udara, Kusta, Arshas, Grahani, Gulma, Shophya, Anaha, Jwara, Krimi
4.	Pippalimool	<i>Pippali longum</i>	Piperaceae	Root	Ushna, laghu,	Katu	Ushna	-	Kapha Vata hara, Bedhana,	Anaha, PleehaSwasa, Gulma, Kshaya
5.	Chavya	<i>Piper chaba</i>	Piperaceae	Stem	Ushna, laghu,	Katu	Ushna	-	Kapha Vata hara, Bedhana,	Anaha, PleehaSwasa, Gulma, Kshaya

DEEPANEYYA DRAVYAS (2)

S.N O.	SANSKRIT NAME	BOTANICAL NAME	FAMILY NAME	PART USED	GUNA (PROPERTIES)				DOSHA KARMA	Dravya Prayogarha Vyadhi
					Guna	Rasa	Veerya	Vipaka		
6.	Chitraka	<i>Plumbago zelanica</i>	Plumbaginace ae	Root Bark	Laghu, Ruksha, Ushna,	Katu	Ushna	Katu	Vata Kapha hara, Deepana, Gr ahi, Pachana,	Grahani, Kushta, Sotha, Arsa, Krimi, Kasa,
7.	Nagara	<i>Cyperus rotundus</i>	Cyperaceae	Rhizome	Sita, Grahi,	Katu, Kashaya	Seeta		Kapha Pitta hara, Deepana, Pachana, Gr ahi,	Trishna, Jwara , Aruchi, Janthuhara,
8.	Ajamoda	<i>Apium graveolens</i>	Umbelliferae	Fruit	Laghu, Ush na, Vidahi,	Katu	Ushna	Katu	Kapha Vata hara, Deepani, Balya, Vrishya	Hridya, Krimi, Hikka, Chardi

DEEPANEEYA DRAVYAS (3)

S.N O.	SANSKRIT NAME	BOTANICAL NAME	FAMILY NAME	PART USED	GUNA (PROPERTIES)				DOSHA KARMA	Dravya Prayogarha Vyadhi
					Guna	Rasa	Veerya	Vipaka		
9.	Hingu	<i>Ferula foetida</i>	Umbelliferae	Resin	Ushna, Teekshna,		Ushna		Vata Kapla hara, Pitta vardaka, Pachana,	Soola, Gulma Udara, Krimi, Anaha,
10.	Amlavetasa	<i>Smilax china</i>	Liliaceae	Rhizome			Ushna		Vata hara, Agni- deepana	Vata Vyadhi, Muthra Shodhana, Adhmana, Shoola

FINGERPRINT DEVIDED IN TO TRI DOSHAS **BASED ON POLARITY AND CONFIGATION**

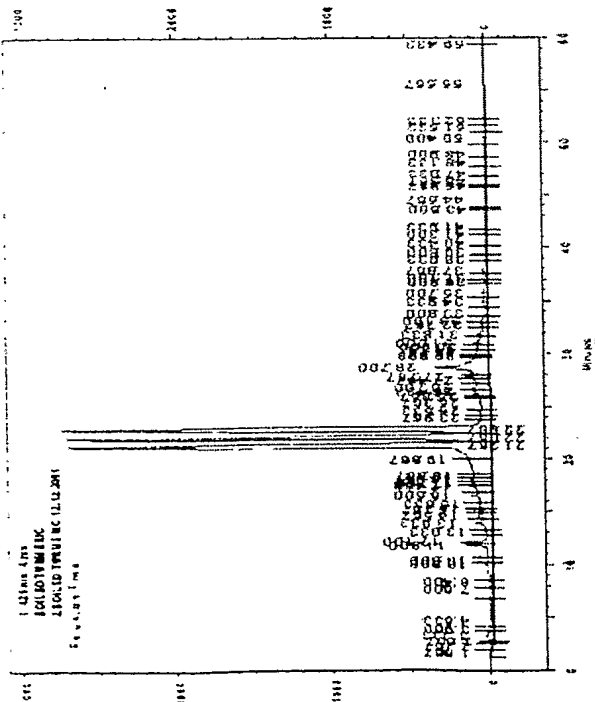
Pitta	Kapha-Pitta	Vata-Pitta	800 nm
Pitta-Kapha	Kapha	Vata-Kapha	Pitta Zone 600 nm
Pitta-Vata	Kapha-Vata	Vata	Kapha Zone 400 nm
Pitta	Kapha	Vata	Vata Zone 200 nm
High Polar Zone	Medium Polar Zone	Non-Polar Zone	
Retention Time (Min) Scale			

Based On The Color Reported, The Entire Fingerprint Image Is Divided In To 3 Zones On X Axis And 3 Zones On Y Axis. X Axis Shows The Polarity Scale Due To The Mobile Phase Composition. Y Axis Shows Conjugation Due To Uv-Vis Absorbance. Thus Constituents Present In The Respective Zones Will Act As Shown In The Figure In The Respective Therapeutic Zones Will Be Providing Respective Therapeutic Efficacy. Quantification Of These Constituents Was Done Using The Uv-Vis Absorptive Property Which Is Directly Proportional To The Quantity Of The Constituent.

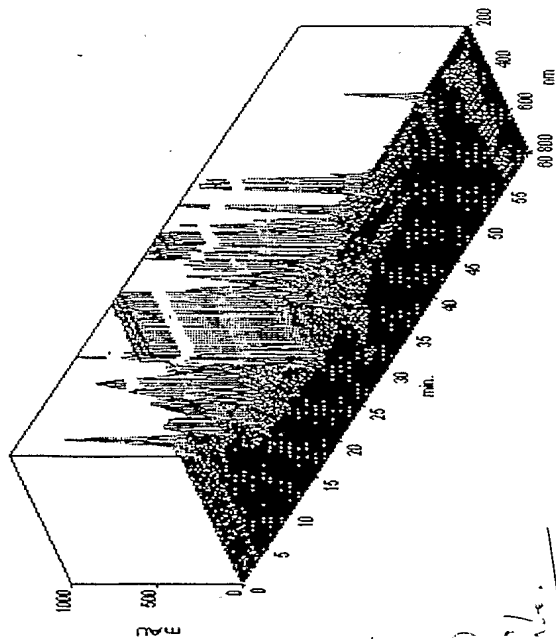
FIG 1

THE FOUR WINDOWS OF A PHOTO DIODE ARRAY DETECTOR

Overlaid Spectra

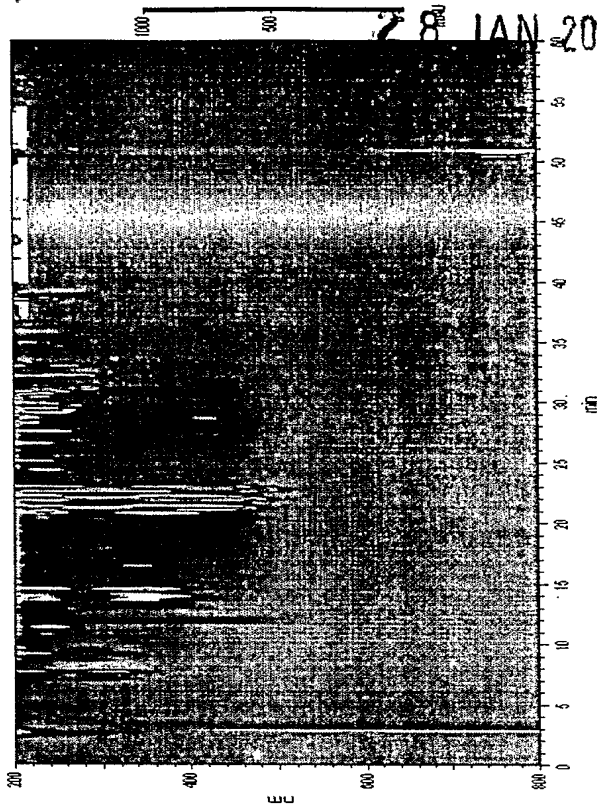


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Thiruv.
(S. R. V. P. S. S. S. S.)

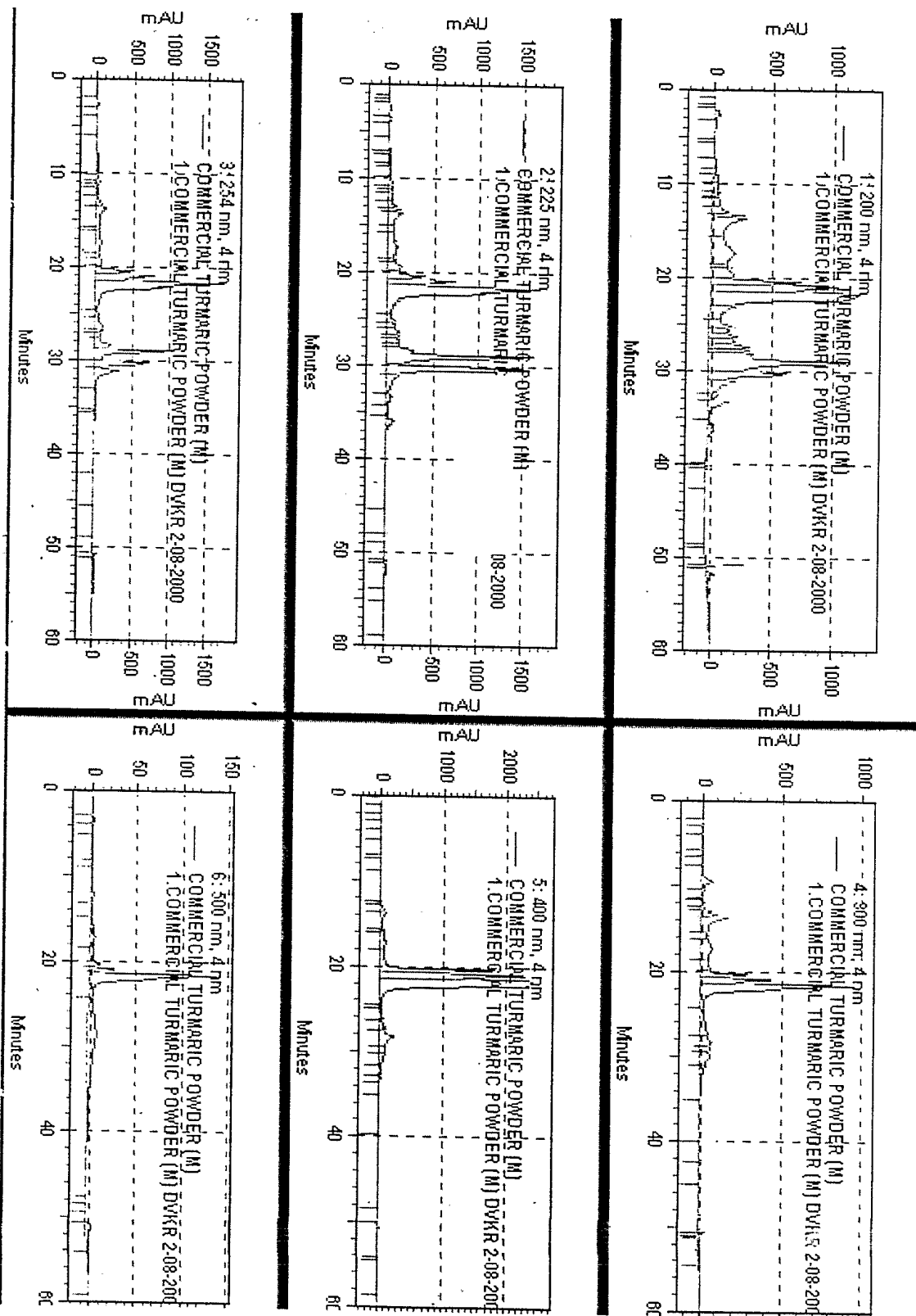
C:\CLASS\VPDATA2\BOILED TURMERIC



0137 DEL 04
 28 JAN 2004

PRESENT METHOD OF CHROMATOGRAPHIC DATA OF A COMMERCIAL TURMERIC POWDER
 AT DIFFERENT WAVELENGTHS WHICH IS NOT USEFUL FOR THE THERAPEUTIC
 STANDARDIZATION IN TERMS OF TRADITIONAL PHILOSOPHIES

FIG 2



Dr. N. P. S. S. S. S.

HEALTH - A BALANCE OF TRIDOSHAS

FIG 3

Kashaya Katu Tikta Lavana Amla Madhura

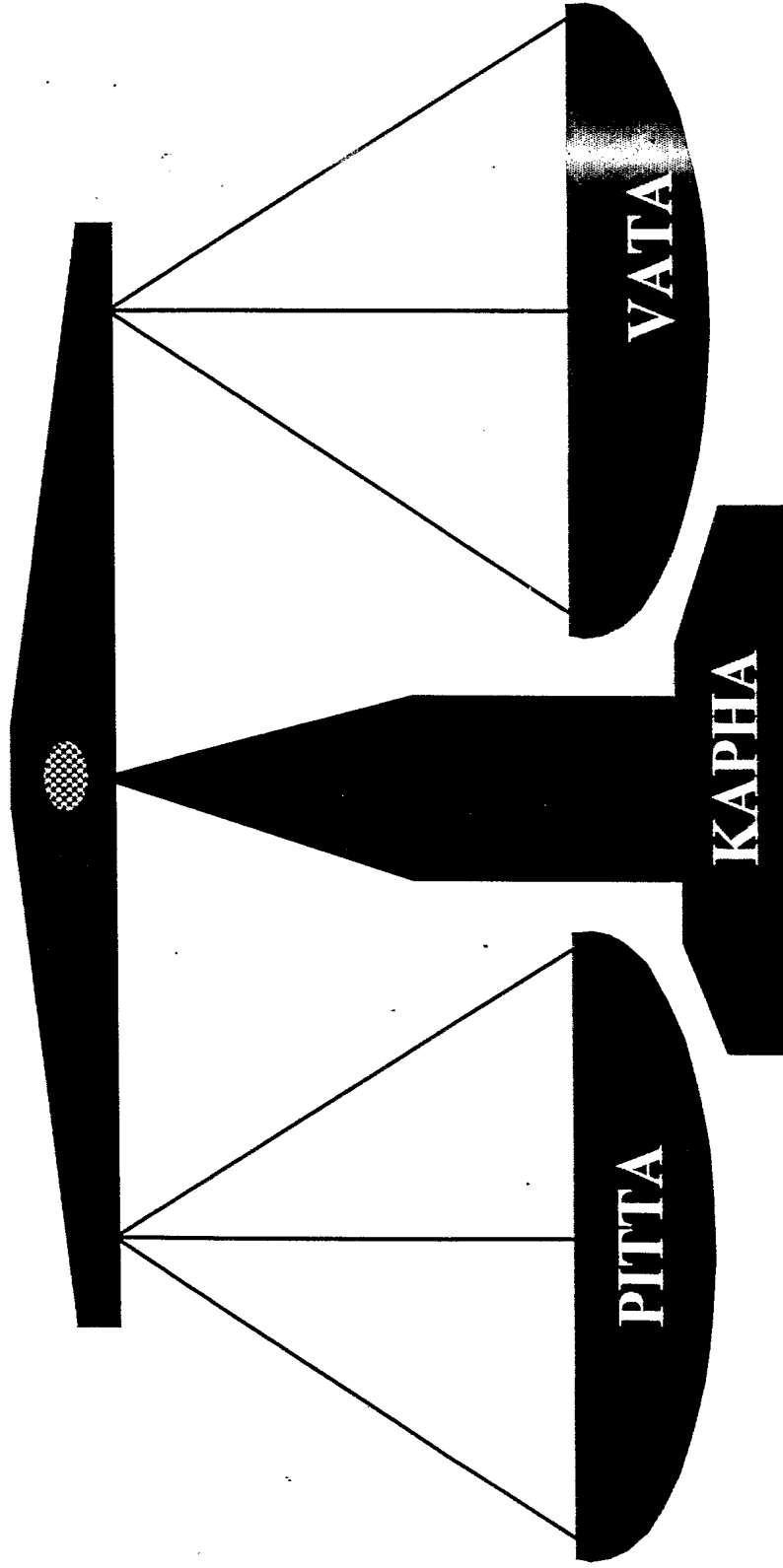
Agni

Jala

Prithvi

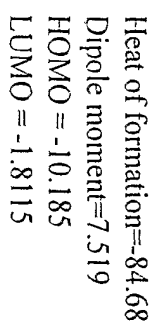
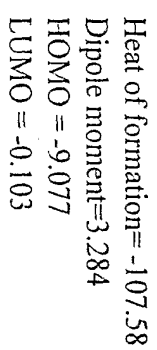
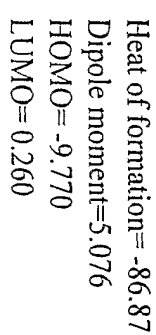
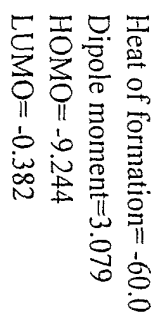
Vayu

Akasa



Dr. Pinto
(Dr. P. Sinha)

Fig. 4



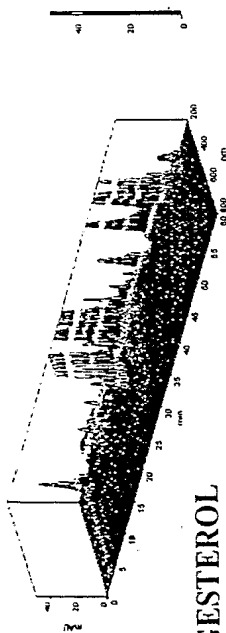
GLIPIZIDE

$$\frac{\partial}{\partial t} \left(\mathcal{R} - v \cdot \nabla \cdot \mathbf{S} \right)$$

CHROMATOGRAPHIC FINGER PRINTING AND MOLECULAR MODELLING: MODERN TOOLS FOR DRUG DISCOVERY

FIG 5

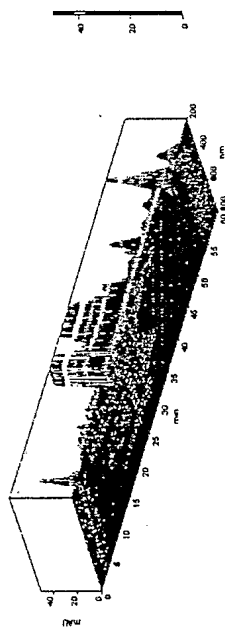
C:\CLASS\VP\DATA\1 NORGE



NORGESTEROL

Heat of formation=-13.96
Dipole moment=3.142
HOMO = -10.1499
LUMO = -0.2455

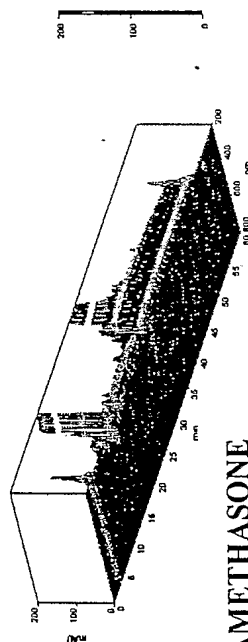
C:\CHROMATOGRAPHIC DATABASE\ALL\UPATH\1 ETHYL ESTRADIOL



ETHYL ESTRADIOL

Heat of formation=-13.58
Dipole moment=0.3321
HOMO = -8.823
LUMO = -0.0814

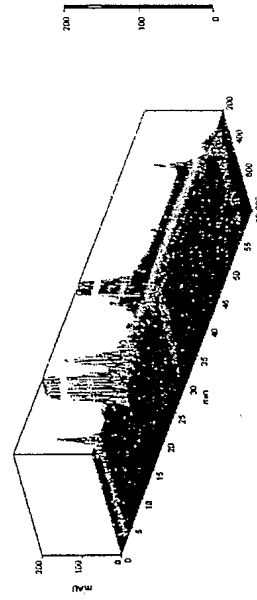
C:\CLASS\VP\DATA\1 BETA METHASONE IP



BETAMETHASONE

Heat of formation=-60.0
Dipole moment=3.079
HOMO = -10.2054
LUMO = -0.531

C:\CLASS\VP\DATA\1 SWASA SUDHARANI DEXA METHASONE

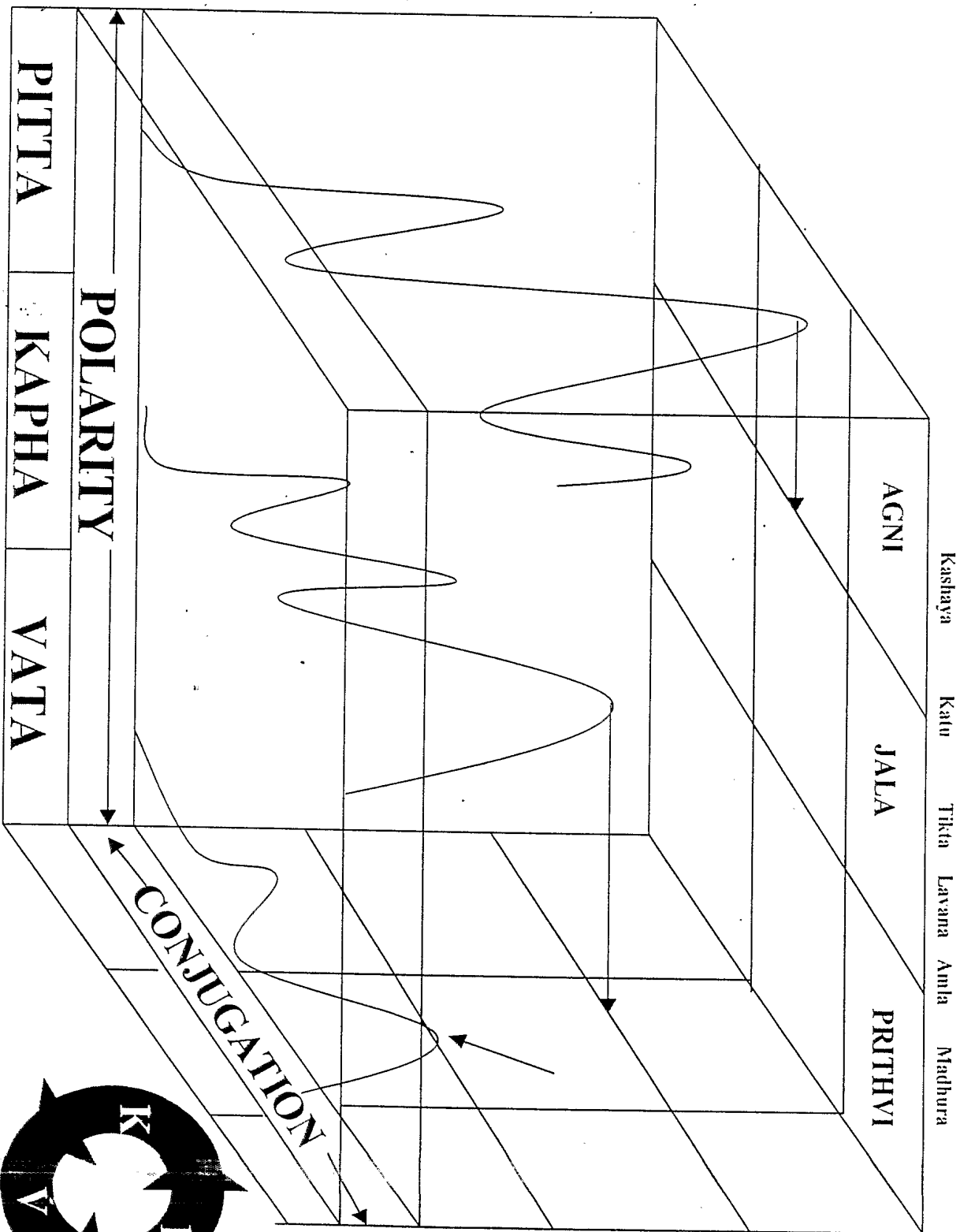


DEXAMETHASONE

Heat of formation=-60.0
Dipole moment=3.079
LUMO = -10.2494
HOMO = -0.2911

Dr. V. P. Sinha
(Dr. V. P. Sinha)

WHEN CHEMICAL CONSTITUENTS WERE ARRANGED IN THE ORDER OF POLARITY THE TRADITIONAL PARAMETERS LIKE TRIDOSHAS WERE FOUND TO BE THE CHEMICAL PROPERTIES OF THE CONSTITUENTS LIKE POLARITY, THE DIVISION OF FINGERPRINT IN TO 27 COMPARTMENTS HELPS FOR CHEMICAL AND THERAPEUTIC STANDARDIZATION OF MATERIALS LIKE FOODS OR MEDICINES



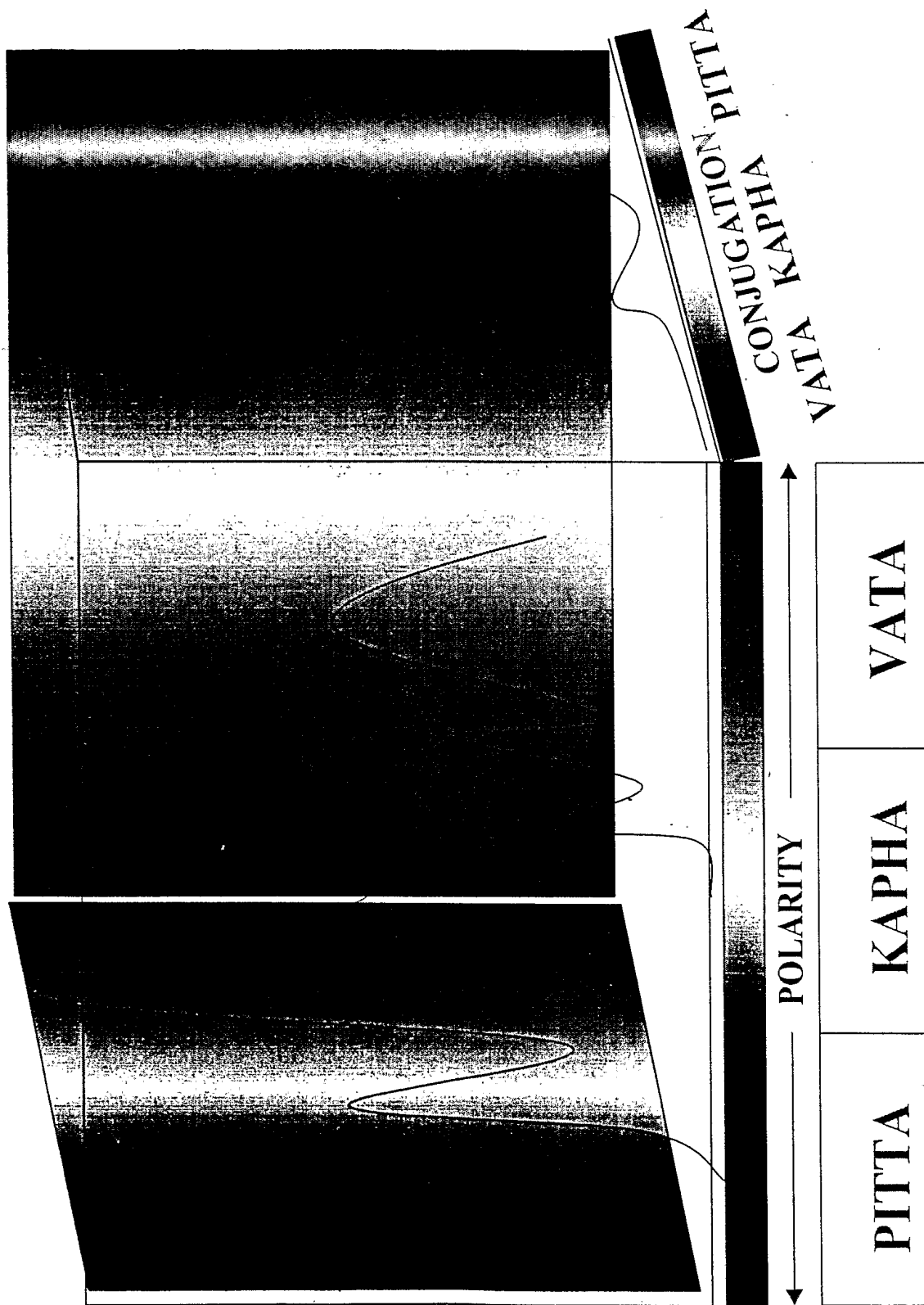
Abundance

Q.1.1.2. (2019)



FIG 7

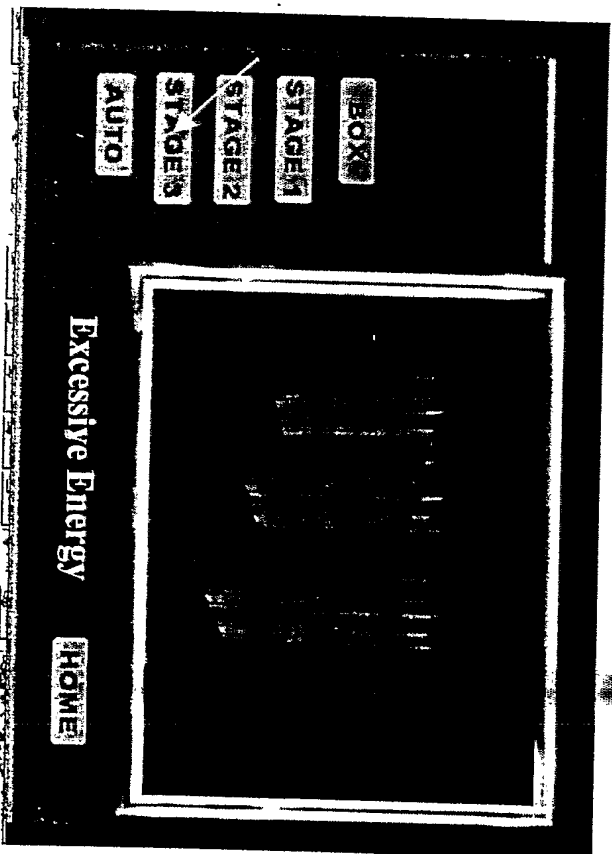
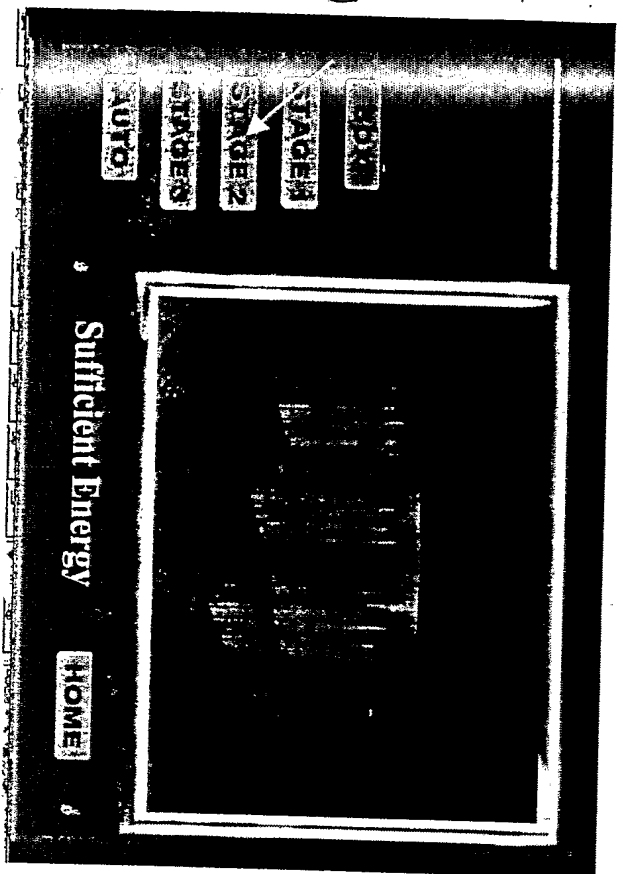
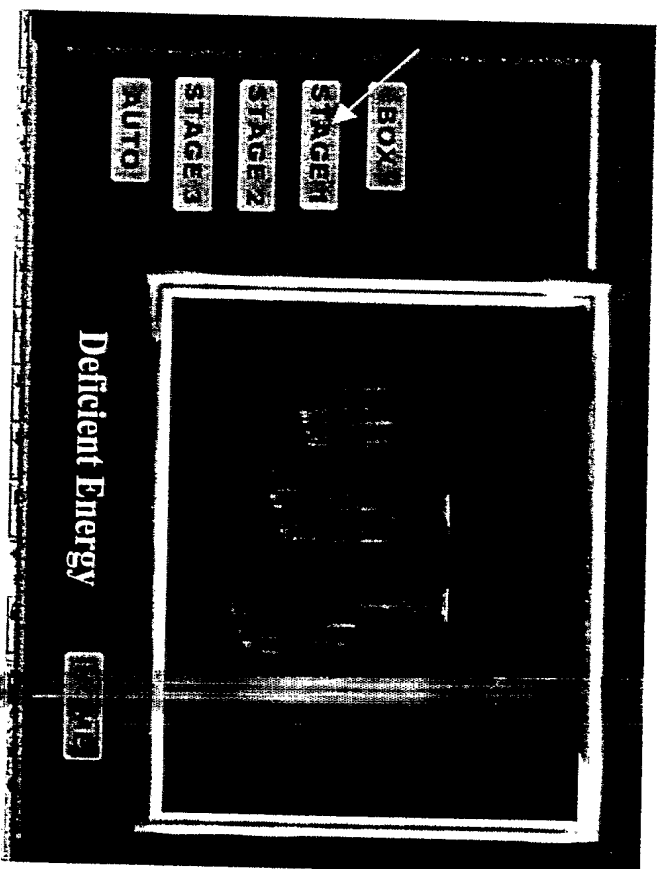
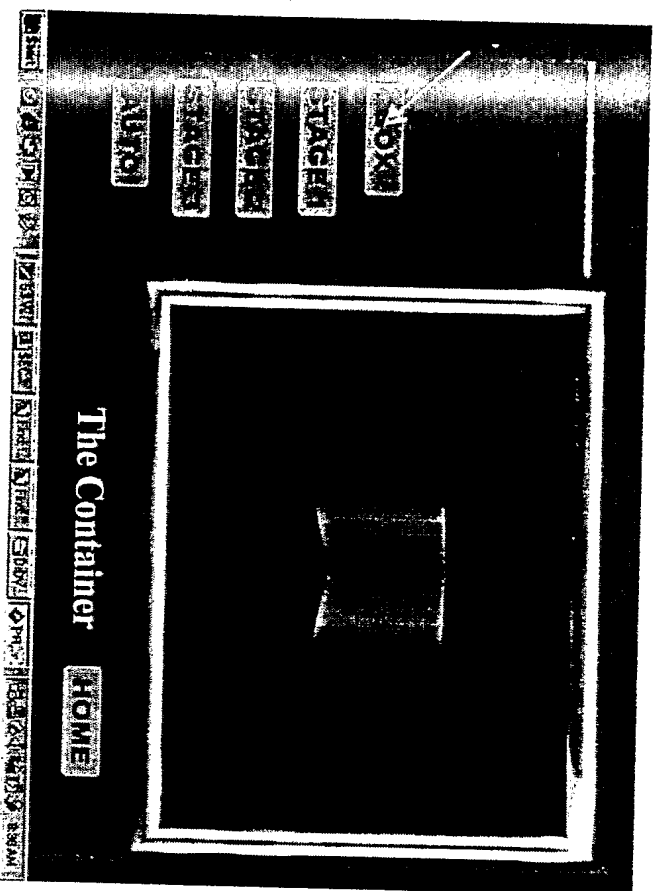
WHEN CHEMICAL CONSTITUENTS WERE ARRANGED IN THE ORDER OF POLARITY AND THE ABSORPTION /EMISSION SPECTRA
OF THE INGRADIENTS WILL HELP FOR CHEMICAL AND THERAPEUTIC STANDARDIZATION OF MATERIALS
LIKE FOODS OR MEDICINES



R. V. P. Singh
(R. V. P. Singh)

THE ENERGY BOX

FIG 8



Handwritten signature
(817P54110)

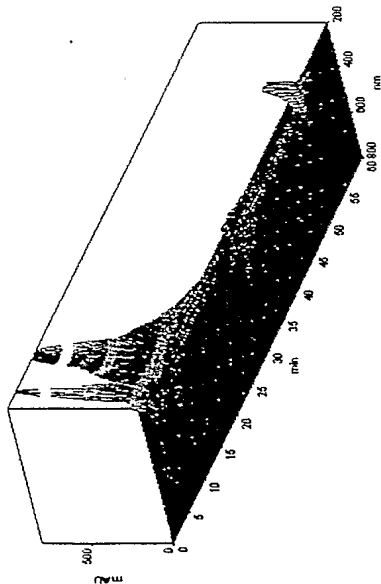
COLOR

A Parameter For Therapeutic Standardization Of Medicines

ASHOKA

A RED COLOR MEDICINE

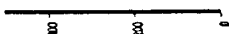
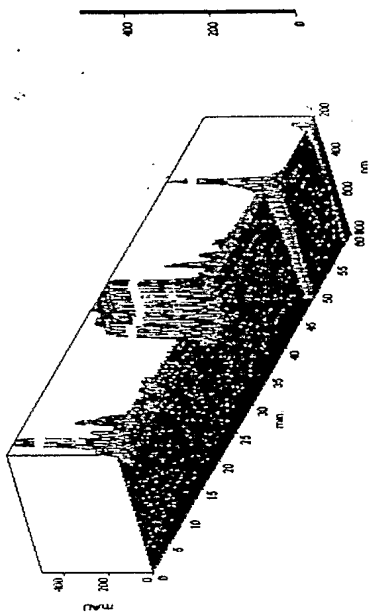
HISINGLE MEDICINESI ASHOKA BARK



PUNNAGA SEEDS

AN YELLOW COLOR EXTRACT

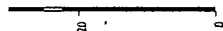
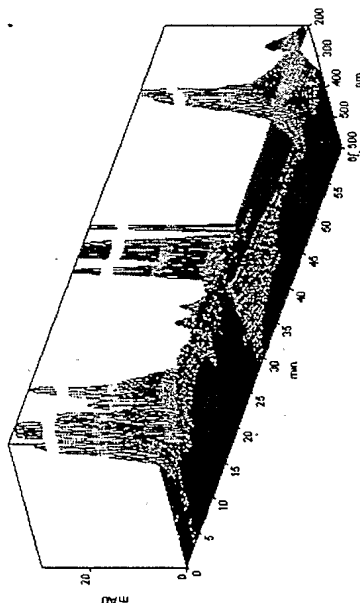
DICLASS VPODATAI PUNNAGA SEEDS



AMALAKI SEEDS

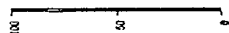
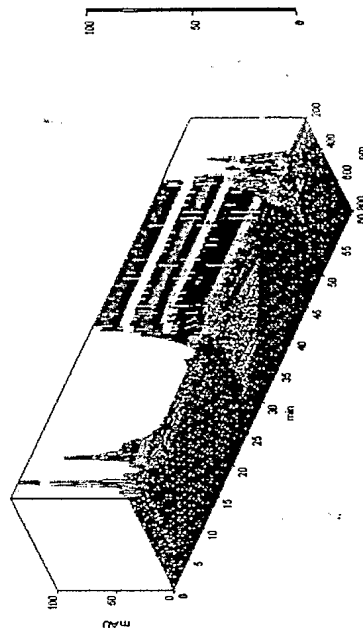
A BLACK COLOR EXTRACT

D IND 1A111 AMALAKI SEEDS



SARKARA

A WHITE COLOR MEDICINE

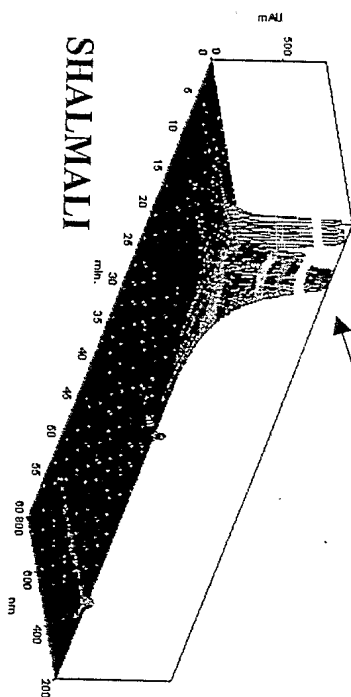


P. S. S. S.
(R. P. S. S.)

KASHAYA (ASTRIENGENT) RASA DRAVYAS

FIG 10

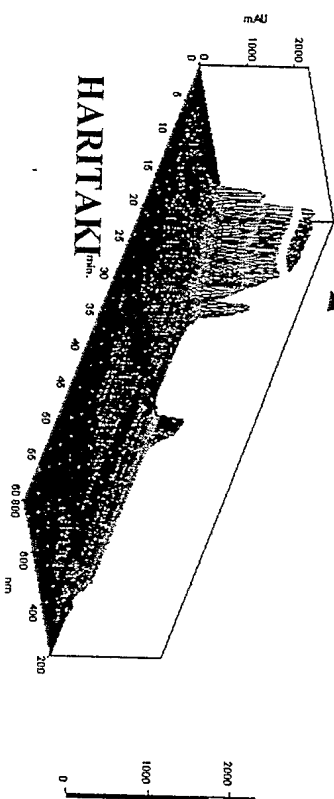
G 1 STUDENTSHOBHA RANINI SHALMAL



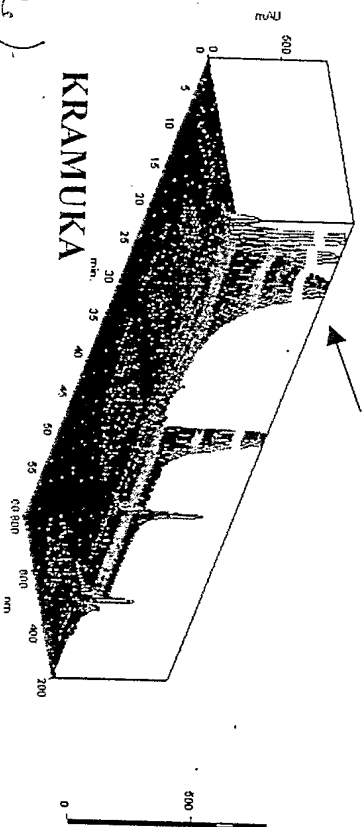
G 1 SINGLE MEDICINES JARECA CATACHU



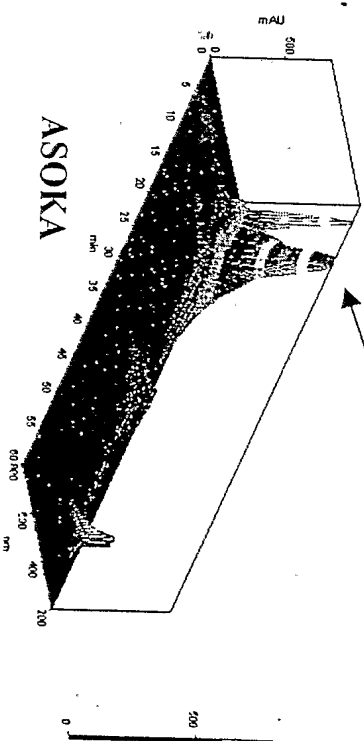
G 1 HARTAK



G 11 KRAMUKHA (DRY, MARKET SAMPLE,



H 1 SINGLE MEDICINES ASHOKA BARK (

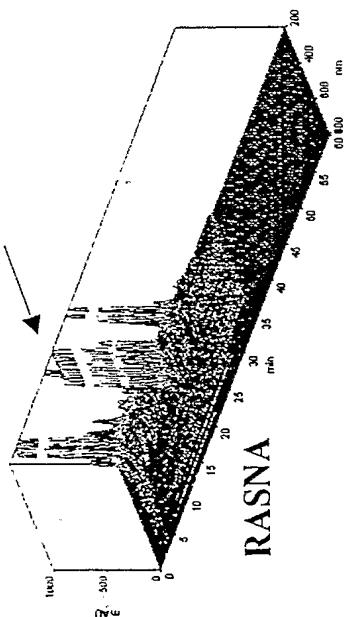


(Dr. P. S. Srinivas)

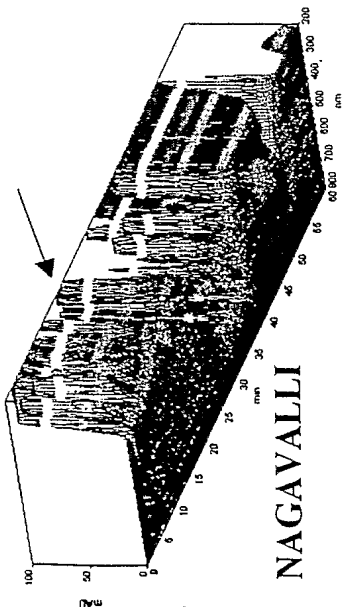
FIG 11

KATU (PUNGENT) RASA DRAVYAS

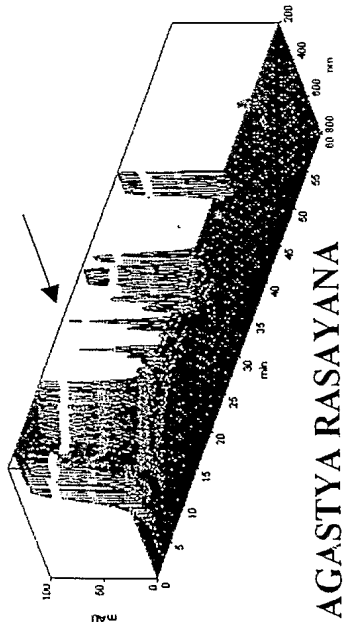
1130301 E MEDICINE (PUNJAGUT) 3 LESSER ORAL ANOAL (



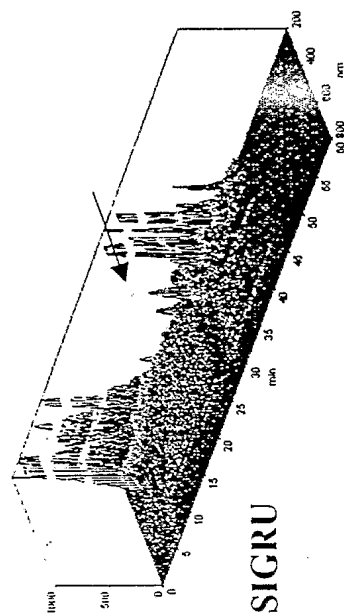
D AND 10 P 111 CULCUTIA PAN LEAF



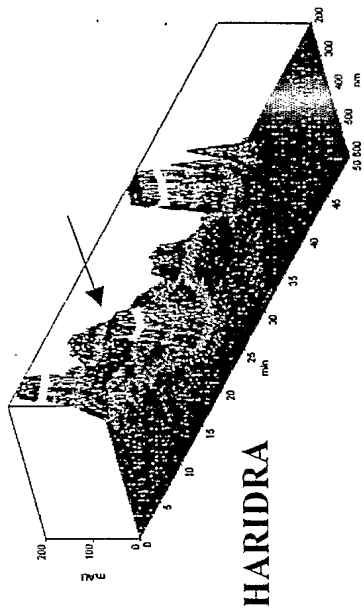
C 10 CLASS VPIAYRI AGASTHYA RASAYANA



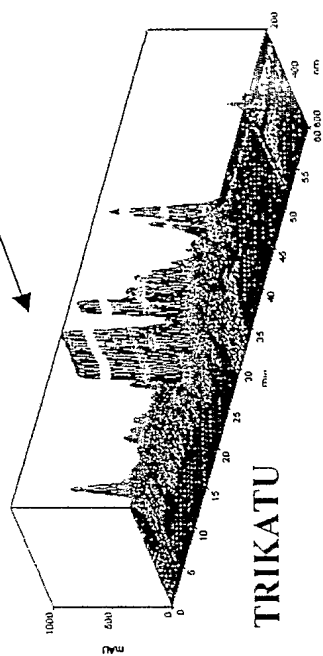
1130301 E MEDICINE (PUNJAGUT) 3 LESSER ORAL ANOAL (



D AND 10 P 111 HARIDRA I



D AND 10 P 111 URVEDIC FORMULATIONS 211 TRIKATU



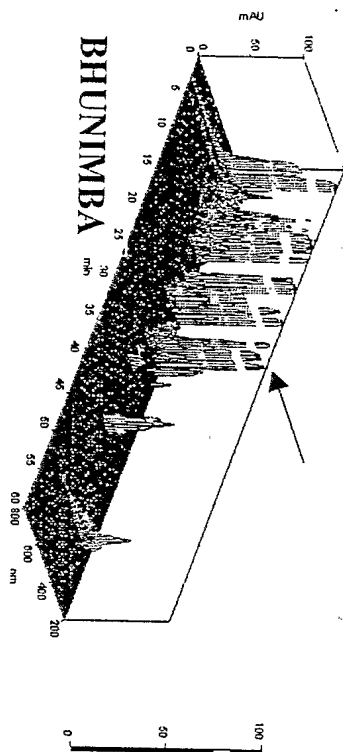
(RVP Srinika)

TIKTA (BITTER) RASA DRAVYAS

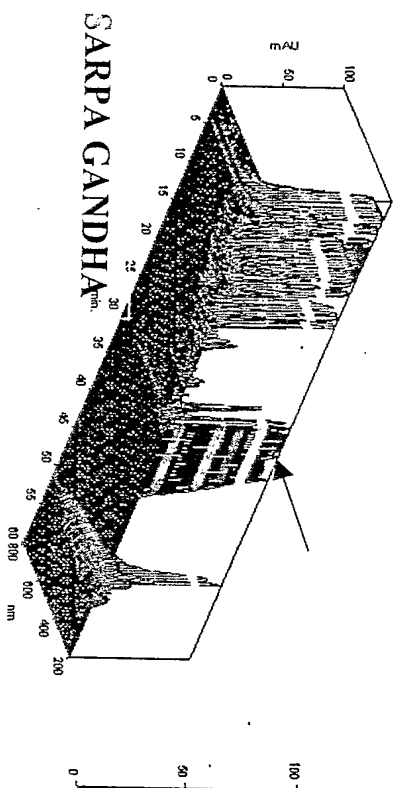
FIG 12

H SINGLE MEDICINESBITERS TIKTANI MELANEMU

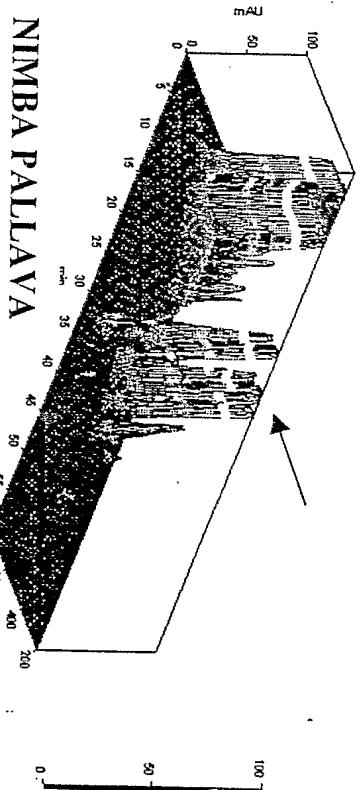
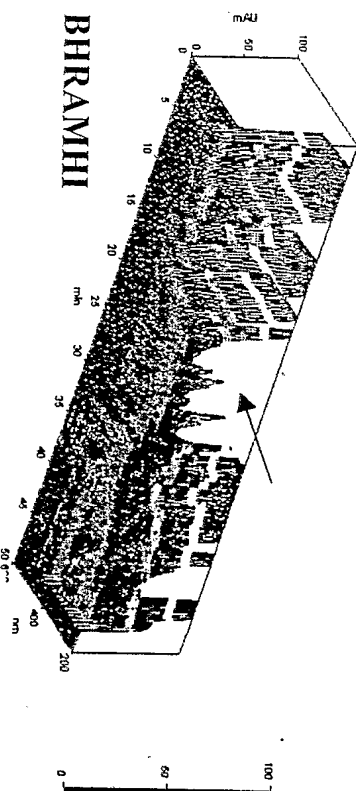
DIVID 118111 BRAMHIGIOMH



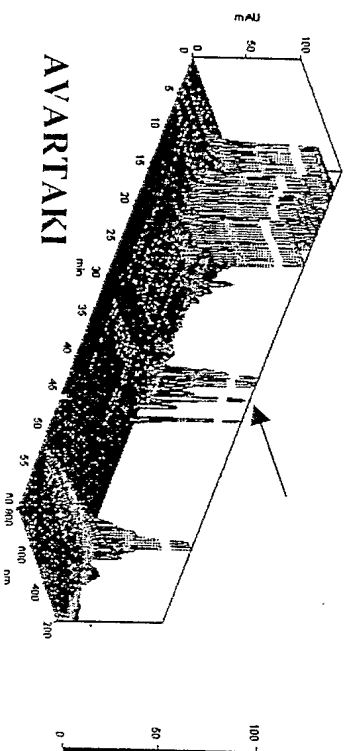
H SINGLE MEDICINESBITERS TIKTANI RAUMOLFIA SERPENTINA (SARPA GANDHA)



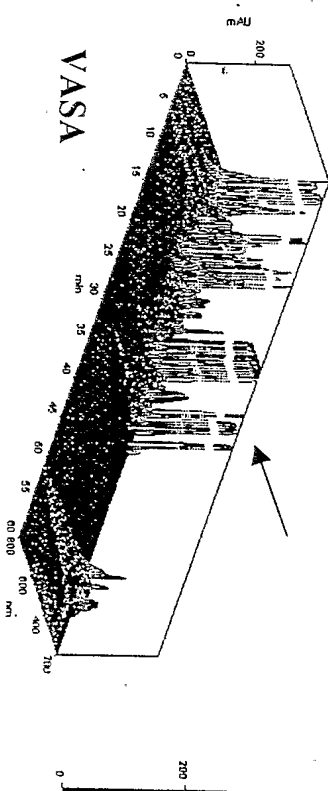
H SINGLE MEDICINESBITERS TIKTANI TENDER NEEF LEAF (VEPA CHIGURU)



H SINGLE MEDICINESBITERS TIKTANI AVARTAKI FLOWEF



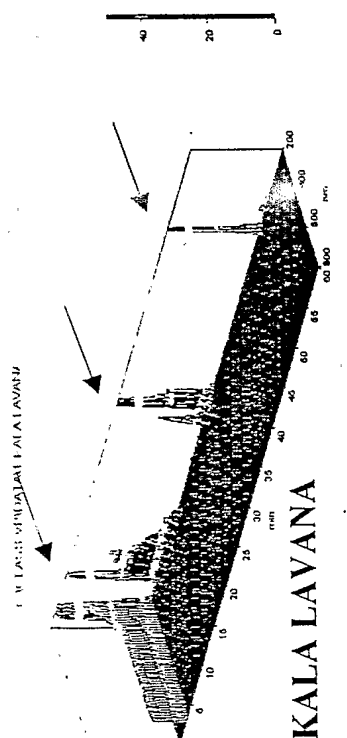
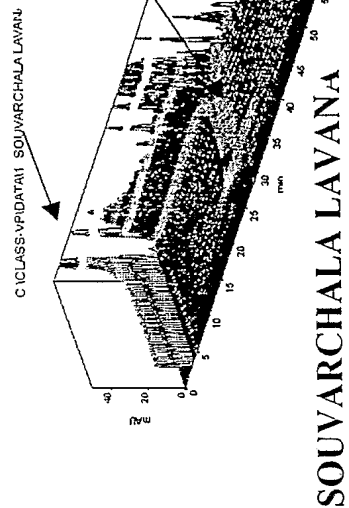
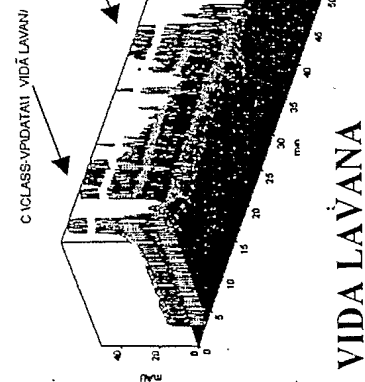
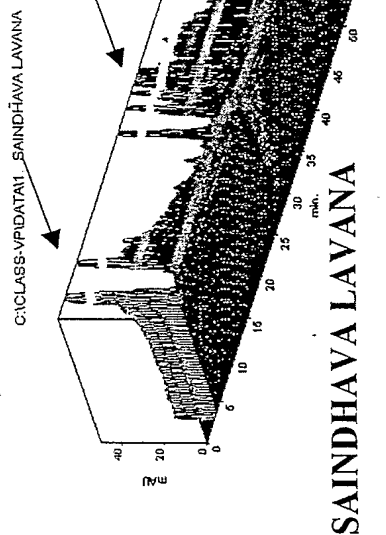
H SINGLE MEDICINESBITERS TIKTANI VASA



(RVP Sinda)

FIG 13

LAVANA (SALT) RASA DRAVYAS

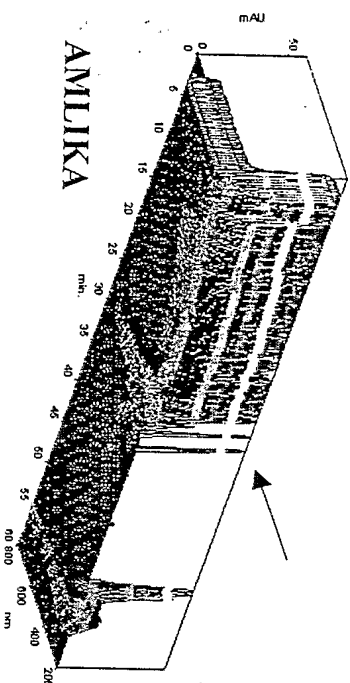


Dr. V. P. Singh
(Dr. V. P. Singh)

AMLA (SOUR) RASA DRAVYAS

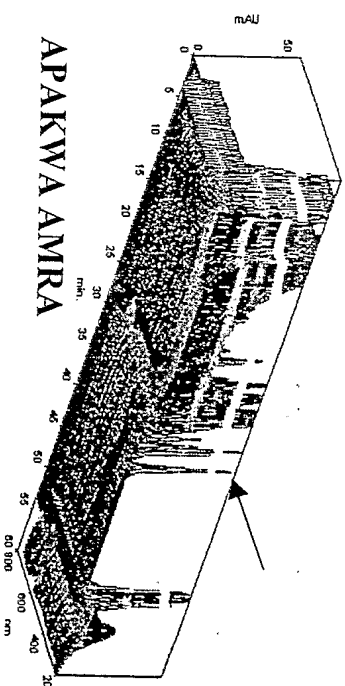
FIG 14

C/CLASS-VIPIDATAI AMLIKA:



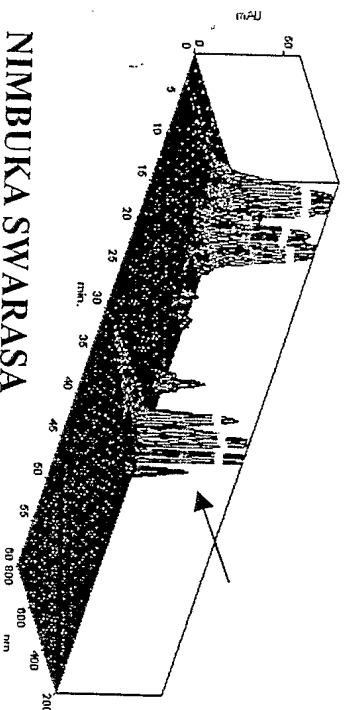
AMLIKA

C/CLASS-VIPIDATAI APAKVA AMRA



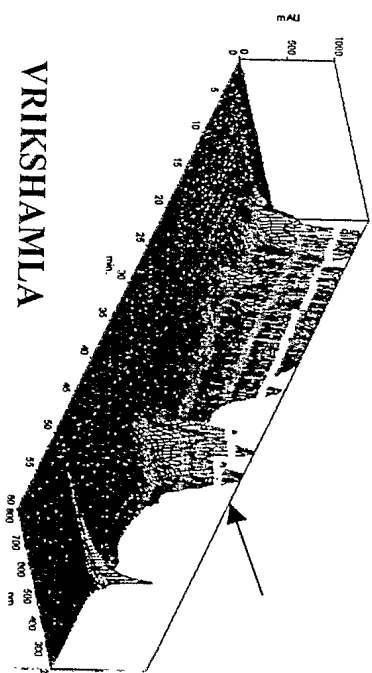
APAKVA AMRA

H/ISINGLE MEDICINESOUR(AMLAN) SWARASA OF LEMON FRUIT



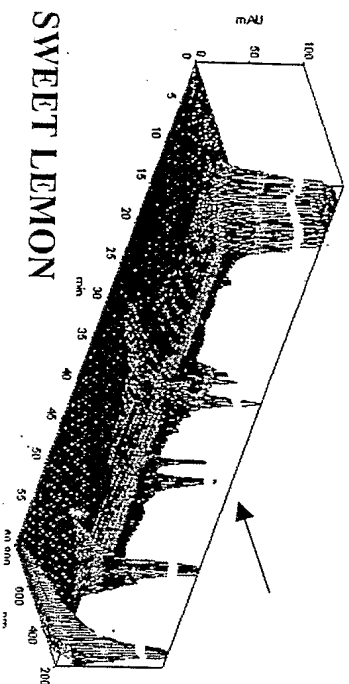
NIMBUKA SWARASA

E/1 VRIKSHAMLA (GARICIN/INDICA-KOROLUK)



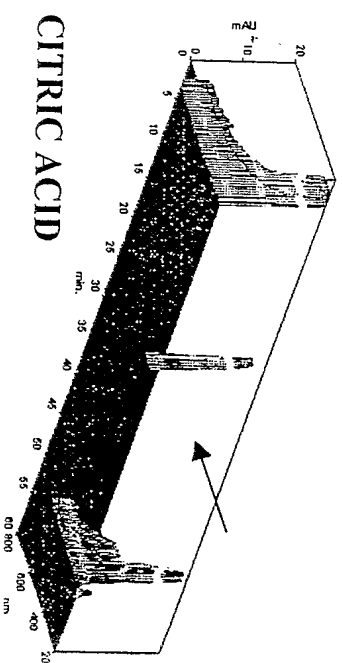
VRIKSHAMLA

D/CLASS-VIPAVRI SWEET LEMON (SOUR)



SWEET LEMON

H/ISINGLE MEDICINESOUR(AMLAN) CITRIC ACID STC



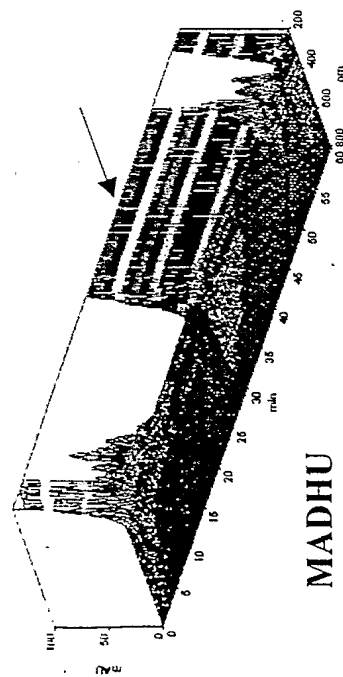
CITRIC ACID

Handwritten signature and text:
R.V. Sankar

MADHURA (SWEET) RASA DRAVYAS

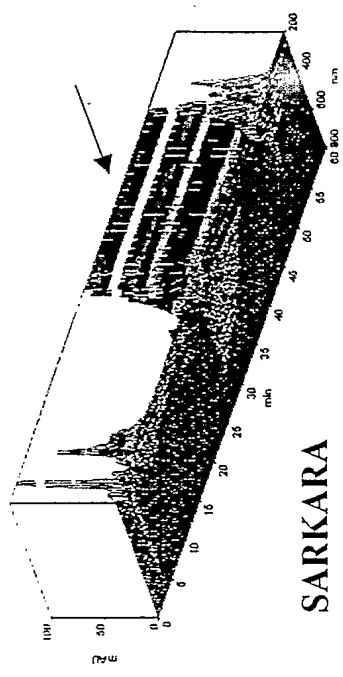
FIG 15

G 11 HONEY OV



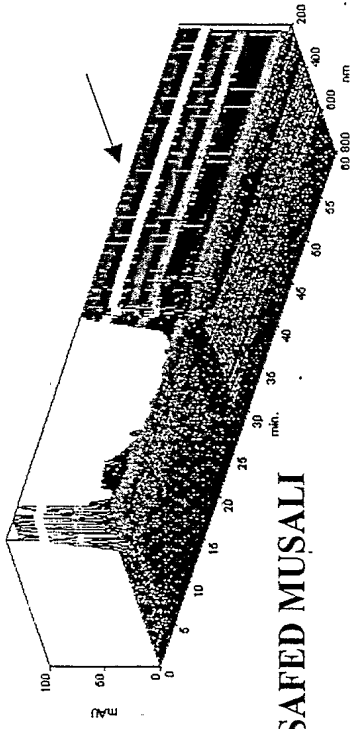
MADHU

G 11 SARKARA



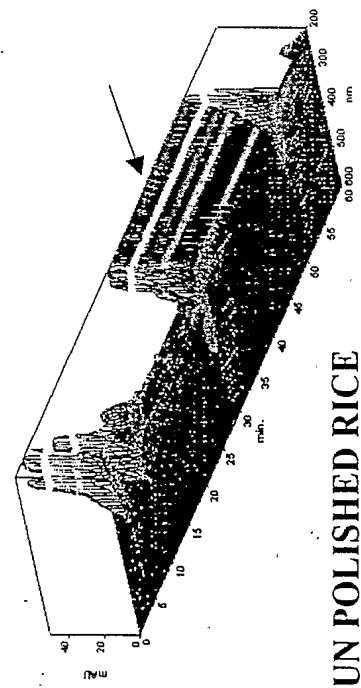
SARKARA

G 1STUDENT'S VB VENIKATESWARLU 1 SAFED MUSALI



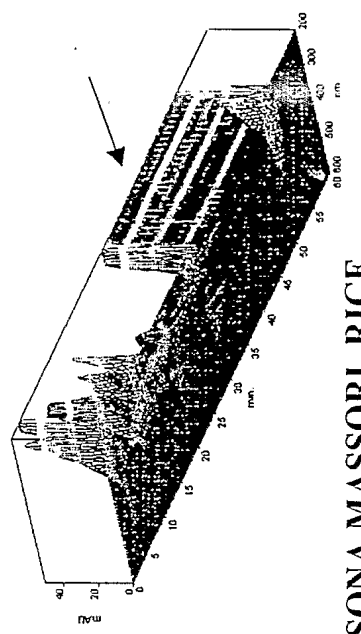
SAFED MUSALI

D 1ND 1S111 UN POLISHED RICE (E)



UN POLISHED RICE

D 1ND 1S111 SONA MASUR RICE (E)

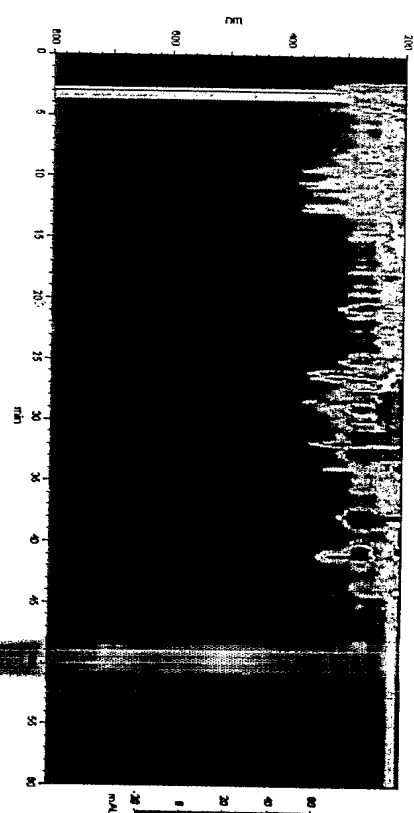


SONA MASSORI RICE

(RVP Singh)

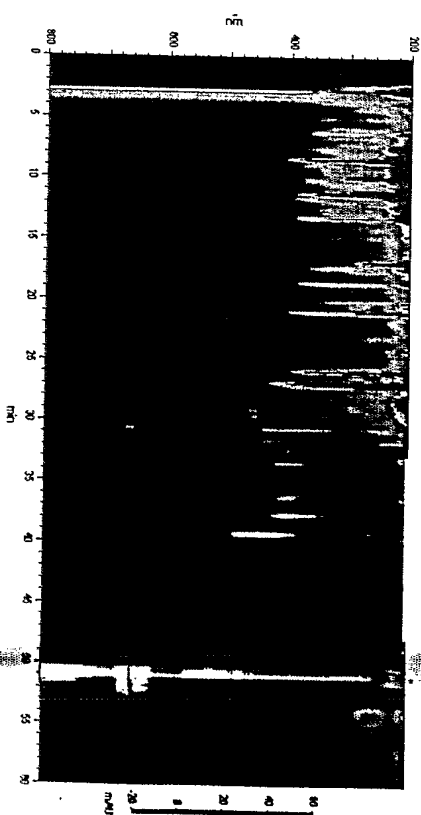
KARAVELLAKA-MOMORDICA DIOICA
C. W. LASS-VPIDATAI KARAVELLAKA

CLASS-VPI/DATA1 KARAVEĹĹAKA



KIRATATIHTA-SWERTIA CHIRAYATA

H:\FILES FROM C:\data on 10012001\17.SWERTIA CHIRATA



BHUNIMBA-ANDROGRAPHIS PANICULATA

HISINGLE MEDICINESIBITERS (TUKTA)1.NELAVEMIL

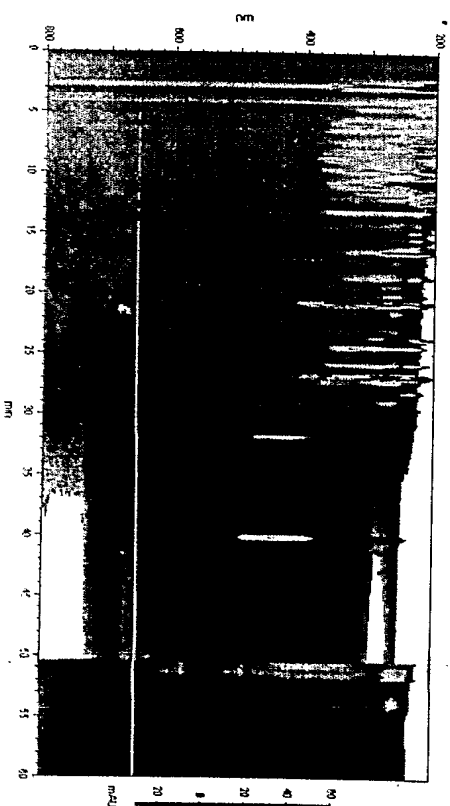
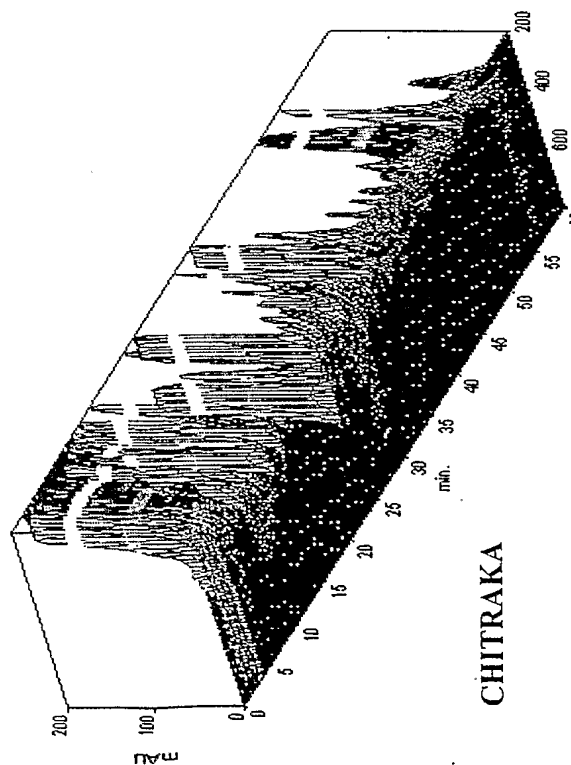


FIG 16

THE PRABHAVA - A SPECIAL PROPERTY (1)

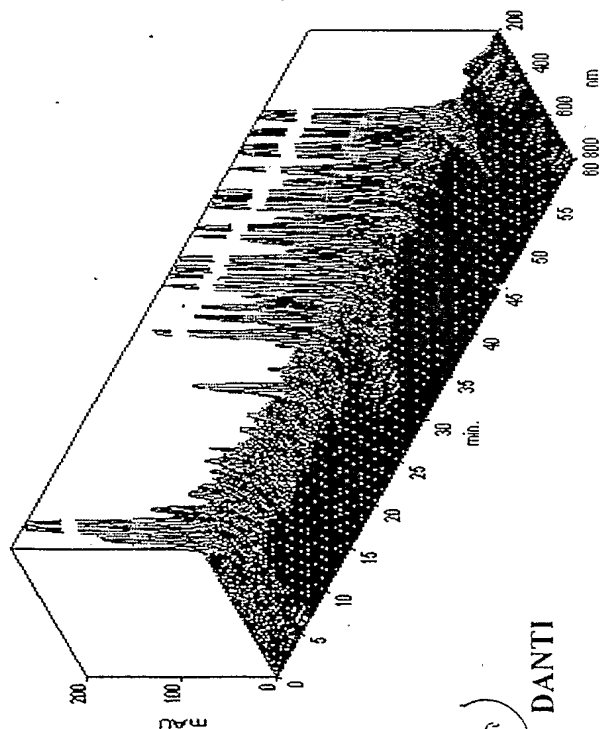
FIG 17

C:\CLASS-VPIDat\1.CHITRAK



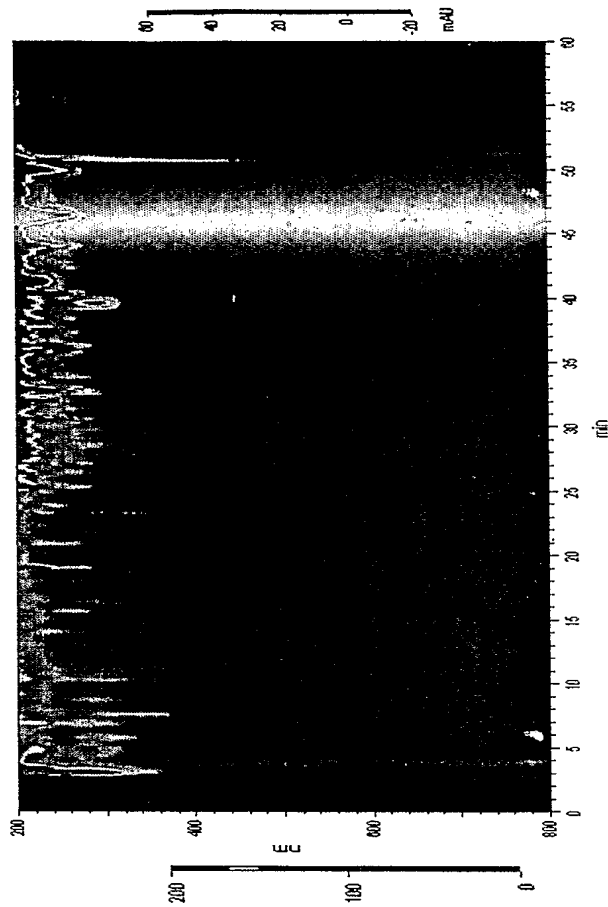
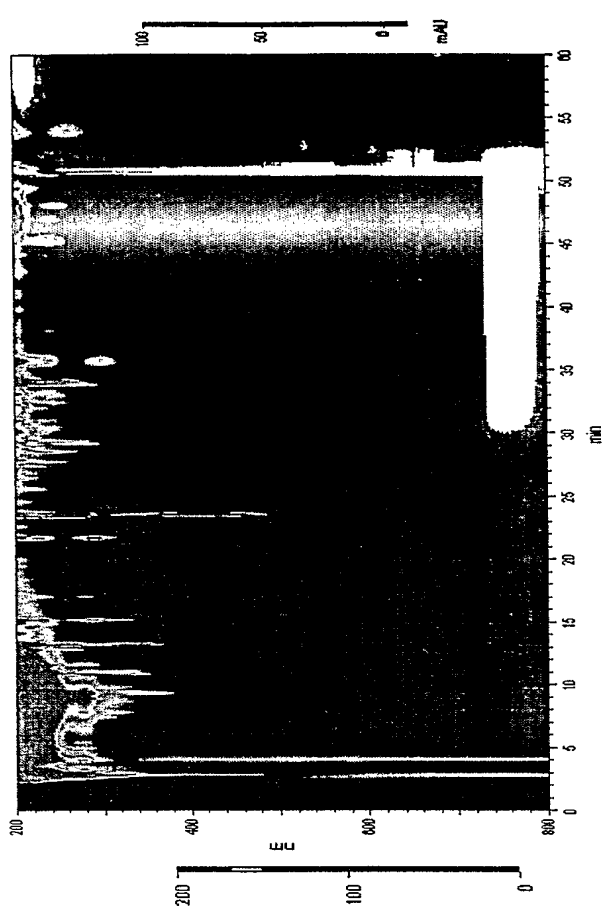
CHITRAKA

C:\CLASS-VPIDat\1.DANTI SEEDS (NEPALA)



DANTI

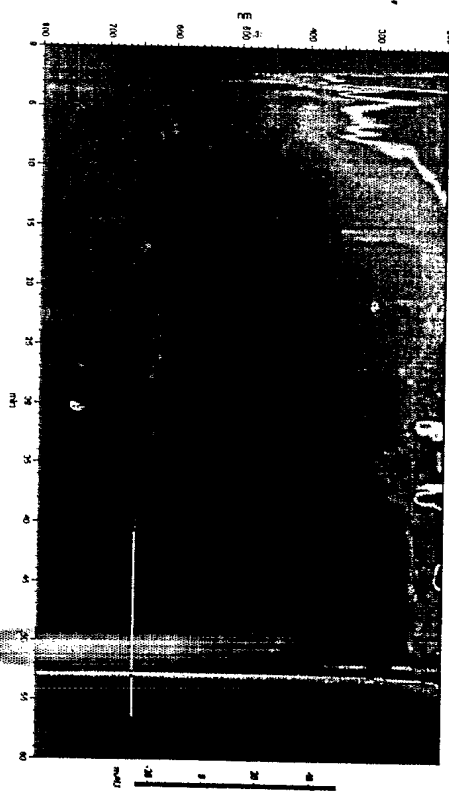
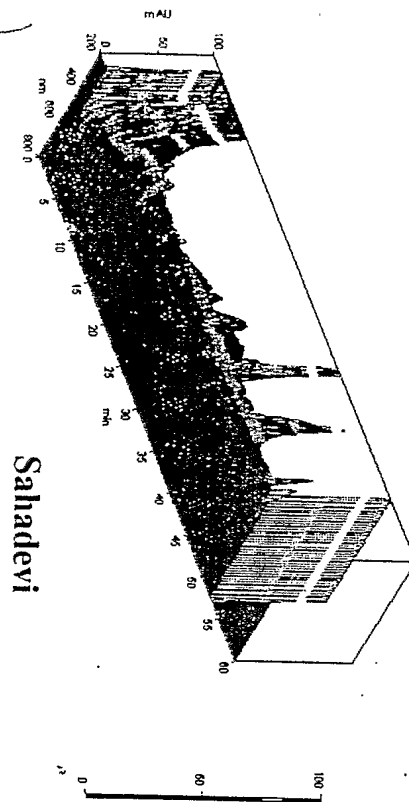
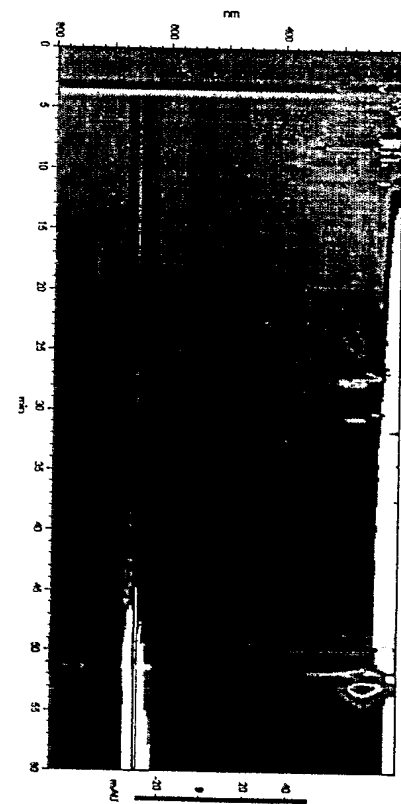
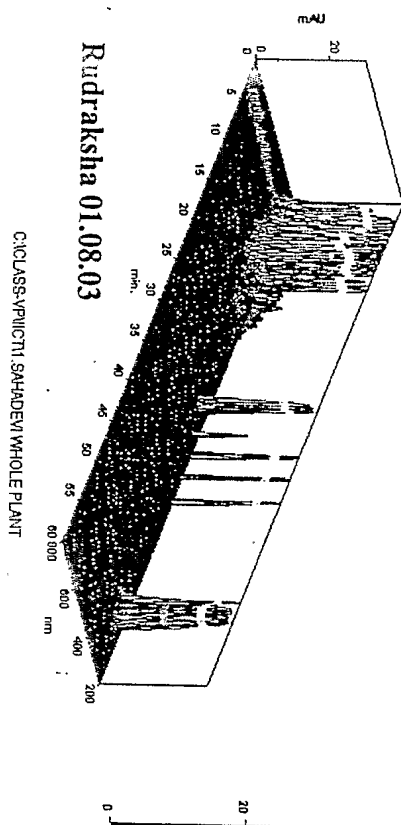
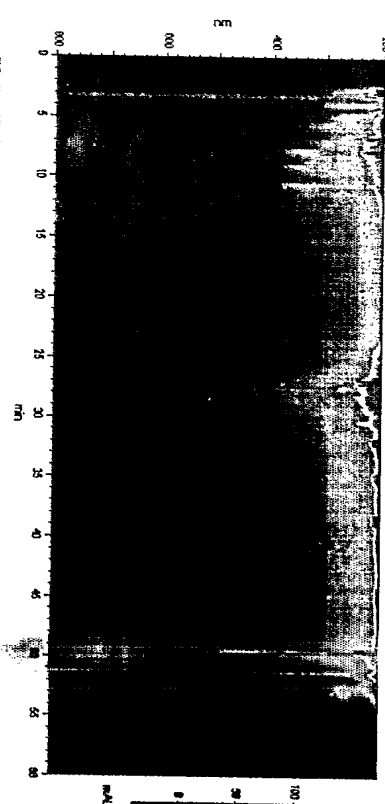
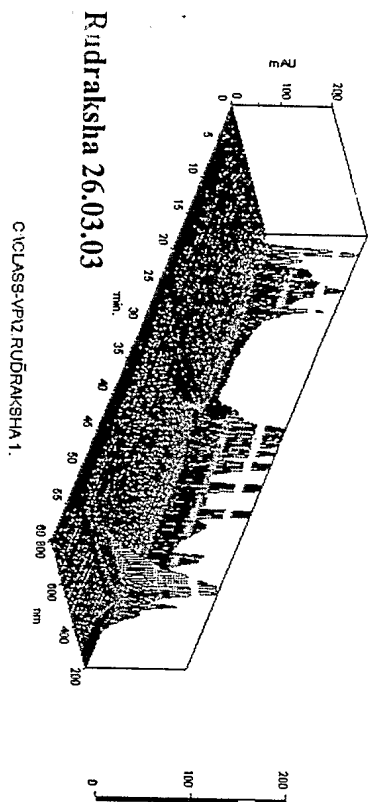
Prabha
(RVP 01-10)



THE PRABHAVA – A SPECIAL PROPERTY (2)

FIG 18

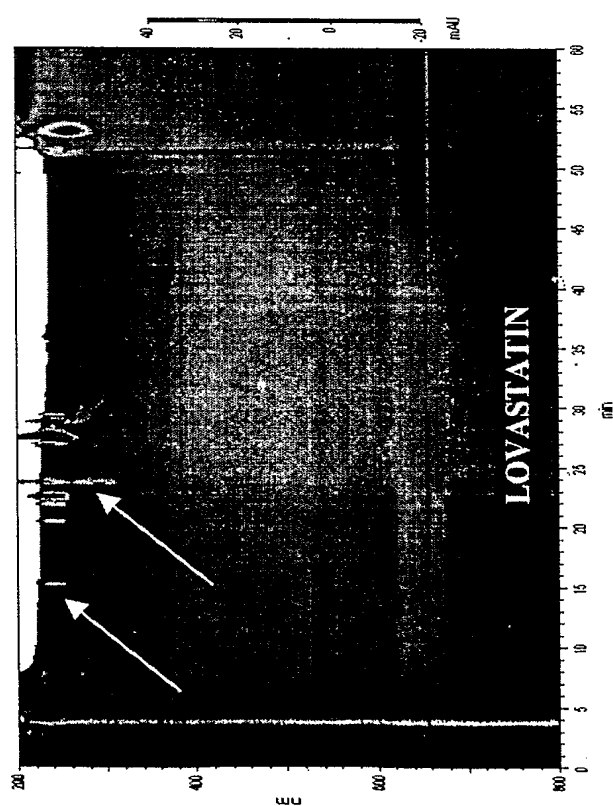
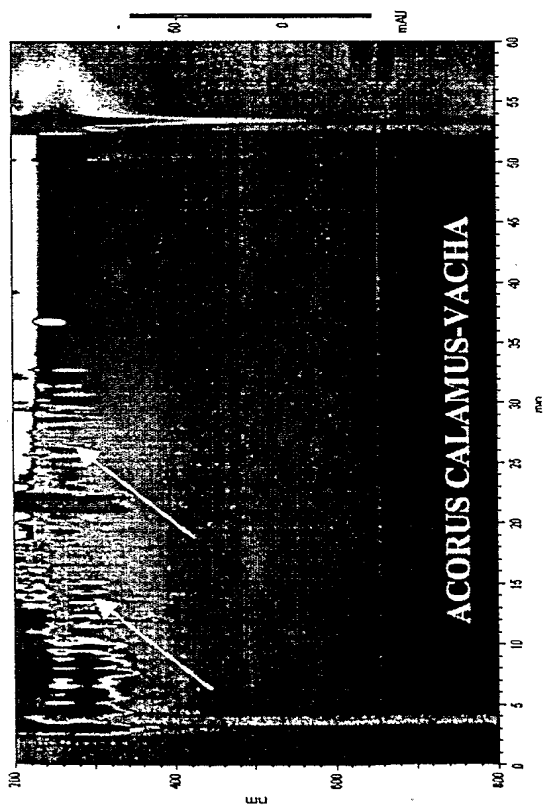
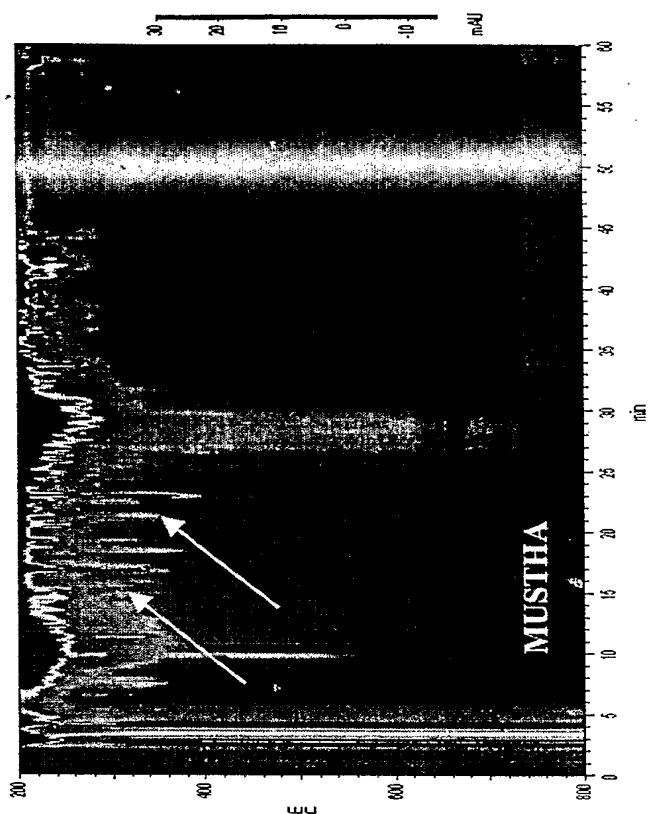
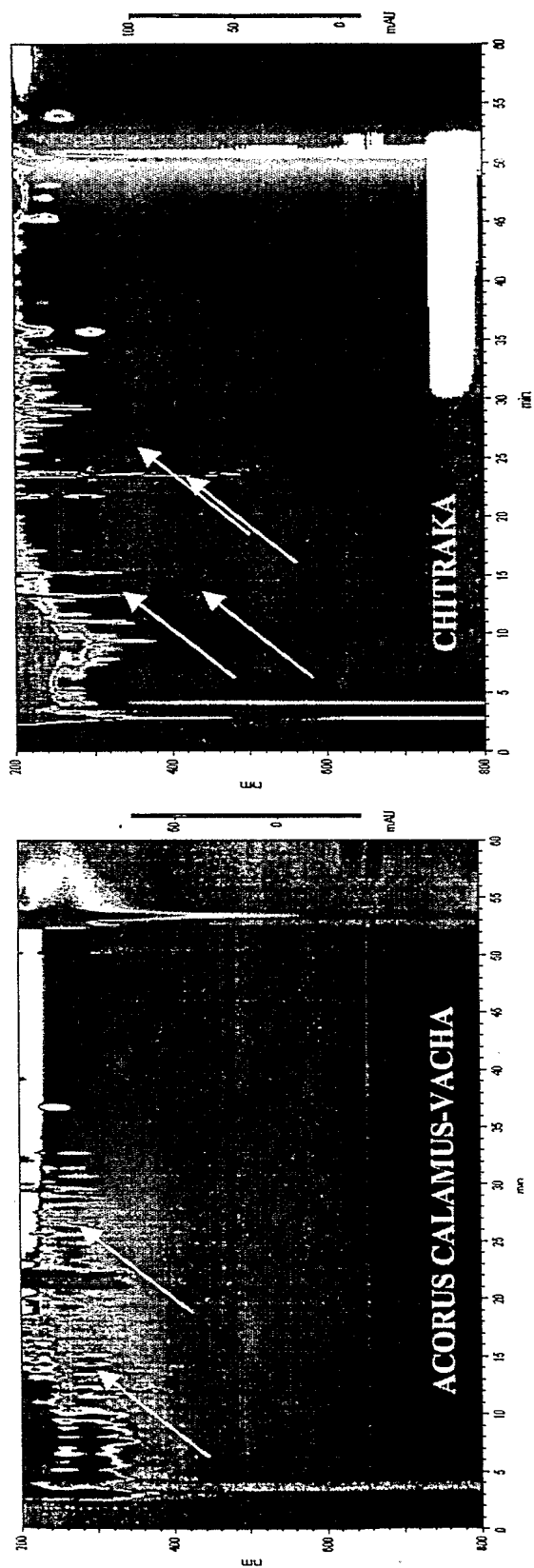
HMBLOOD SAMPLES OF CRDII RUDRAKSHA (MASHI);



Handwritten signature
RVP Srinika

FIG 19

LEKHANEYA DRVYAS OF CHITRAKA DASHAIMANI



Oberts
RVPSintg

JEEVANEYA DRAVAYAS

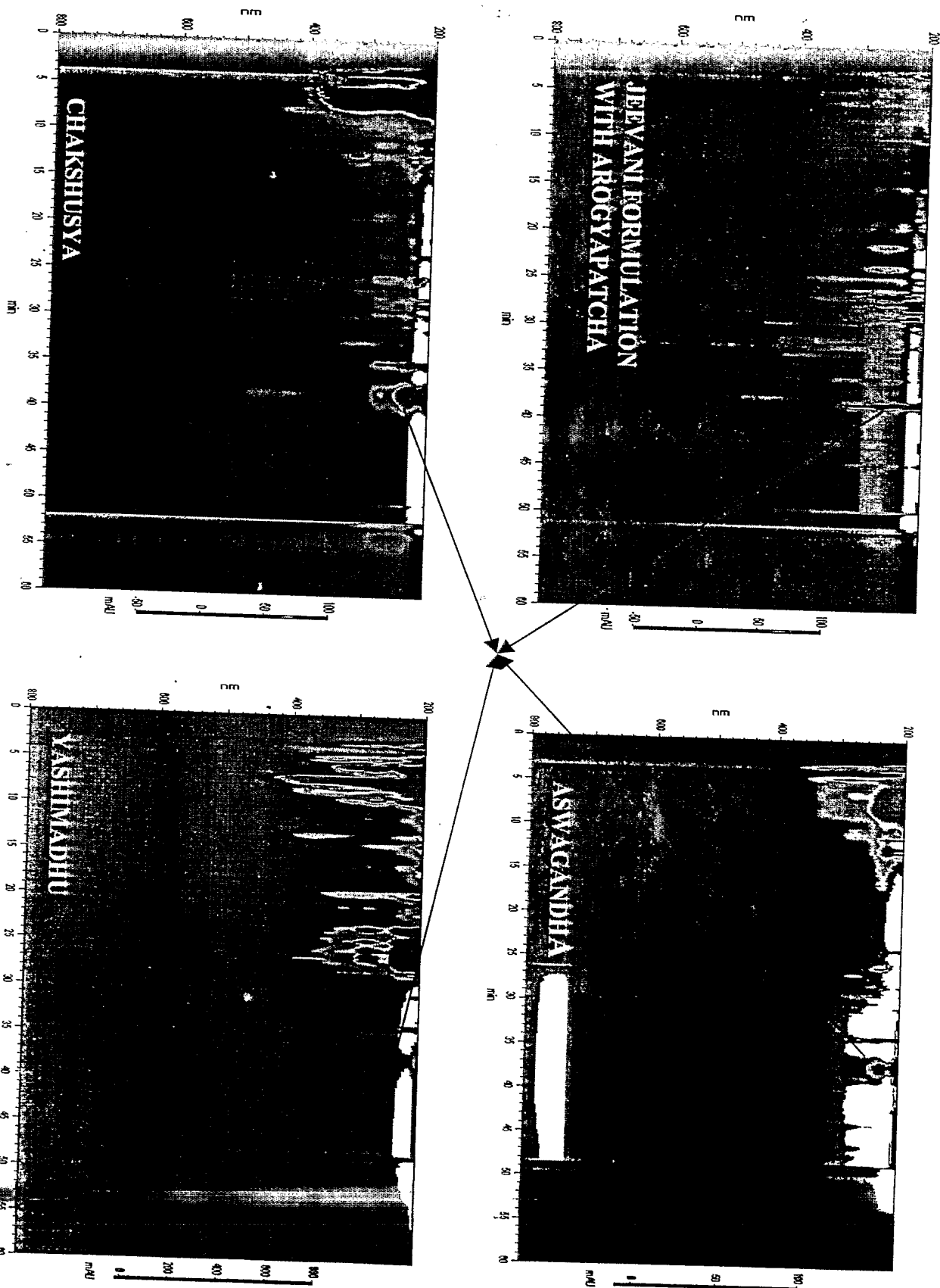
FIG 20

JEEVANI FORMULATION
WITH ARGYAPATCHA

CHAKSHUSYA

ASWAGANDHA

YASHIMADHU

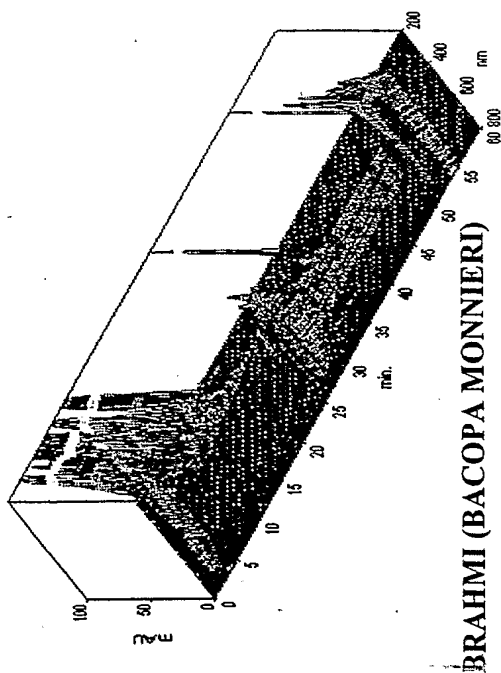


(Signature)
(SRP Siroko)

FIG 21

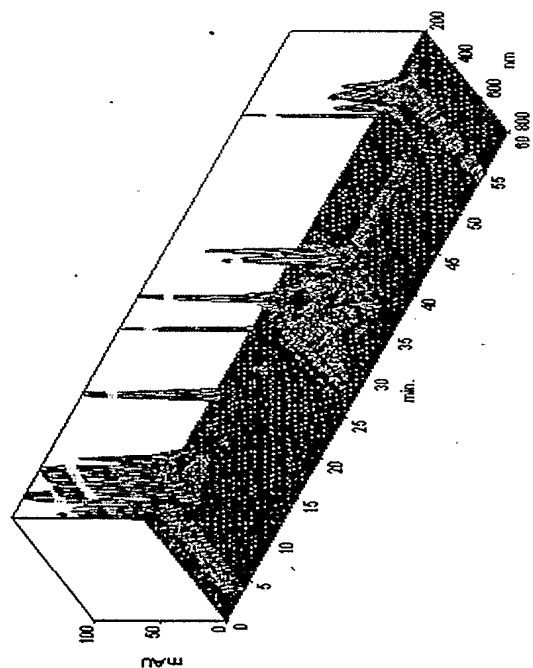
MEDHYA DRAVYAS USED IN TRADITIONAL MEDICINES

C:\CLASS-VP\1.BRAHMI (BACOPA MONNIERI) I



BRAHMI (BACOPA MONNIERI)

C:\CLASS-VP\11.MANDUKAPARNI (CENTELLA ASIATICA) I

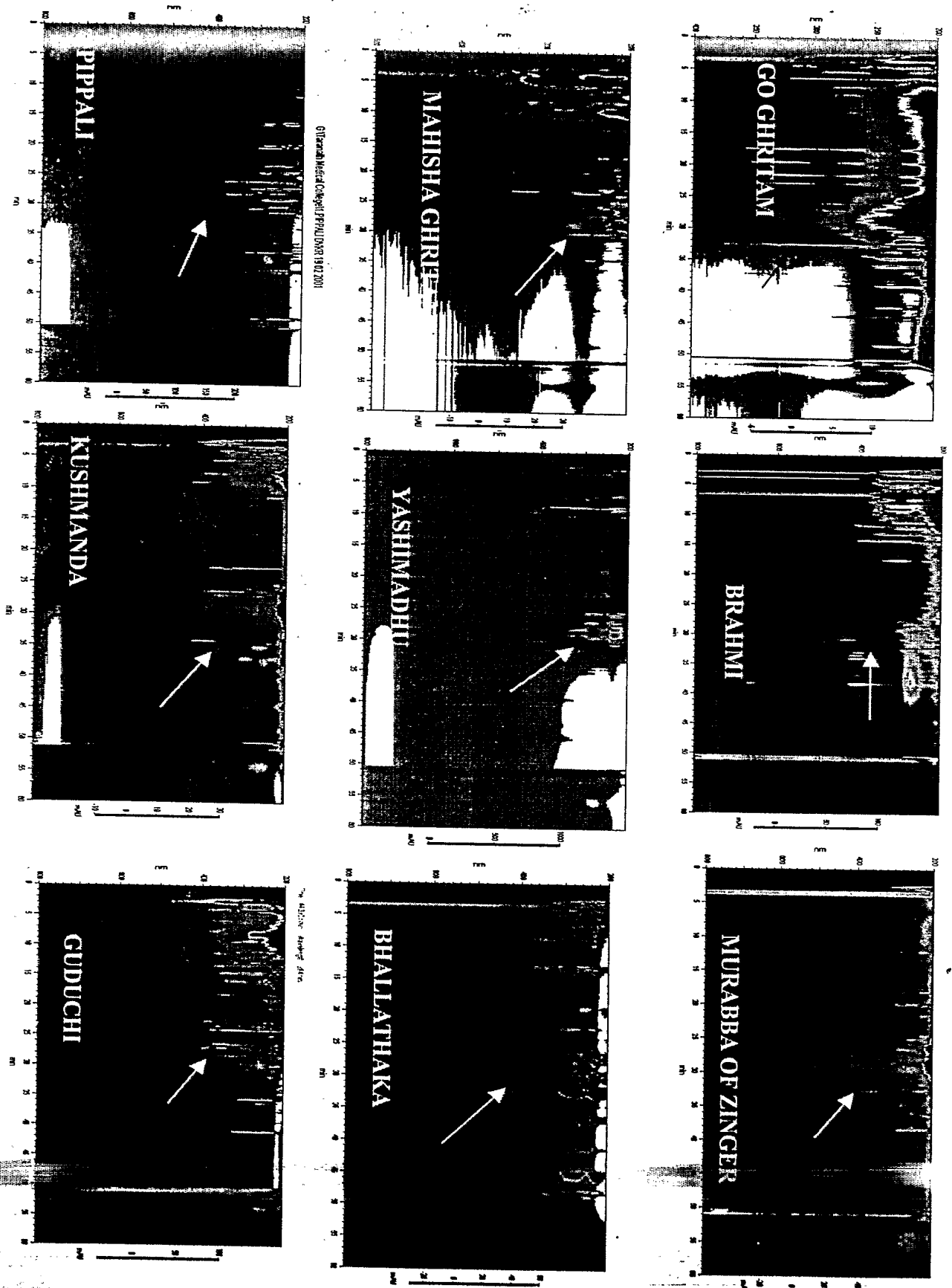


MANDUKAPARNI (CENTELLA ASIATICA)

Dr. P. S. S. S. S.
(R v P S i n t e)

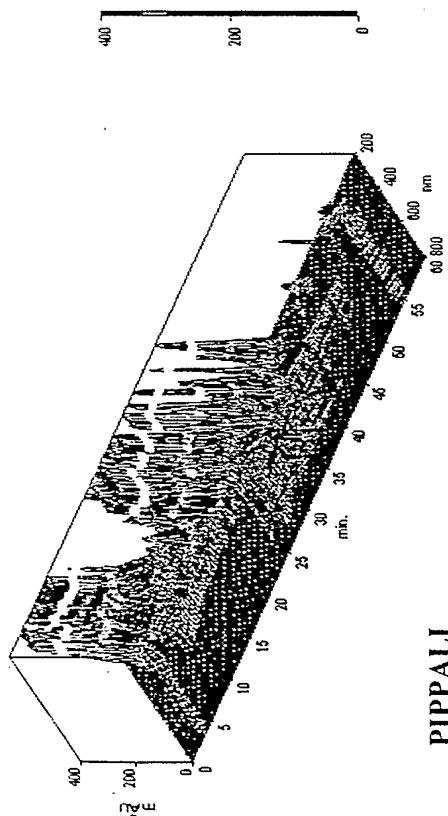
FINGER PRINTS OF MEDHYA KASAYANA DRAVYAS (I)

FIG 22

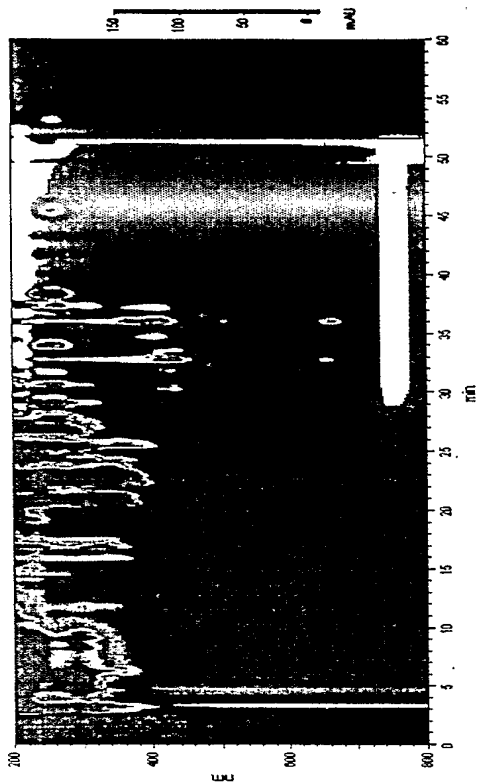


Dr. S. K. Srinivas
(overseer)

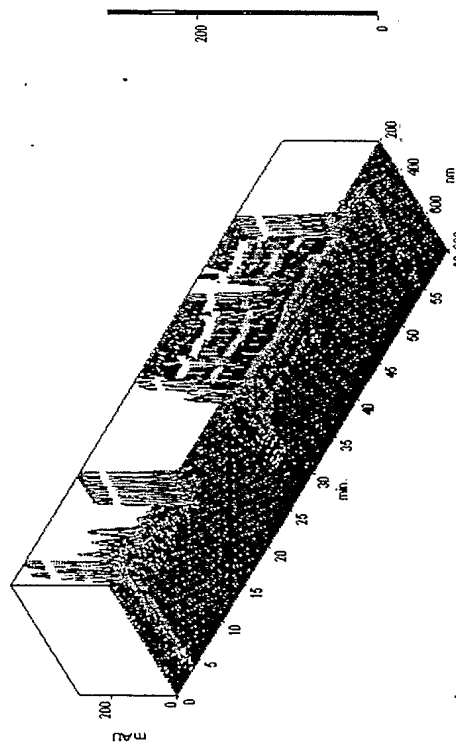
C/CLASS-VP11 PIPPALI



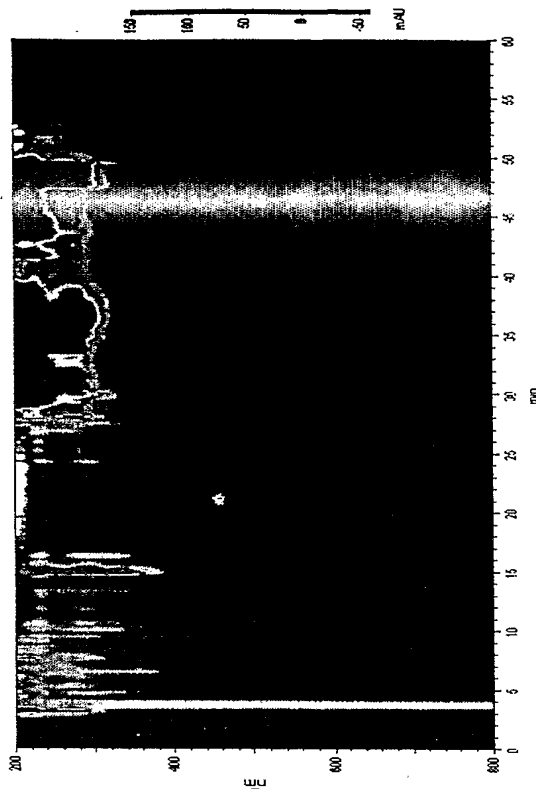
PIPPALI



C/CLASS-VP11 BHALLATKA (ISCHITIKA CHOORNA PROCESSED) STEP-II



PROCESSED BHALLATHAKA

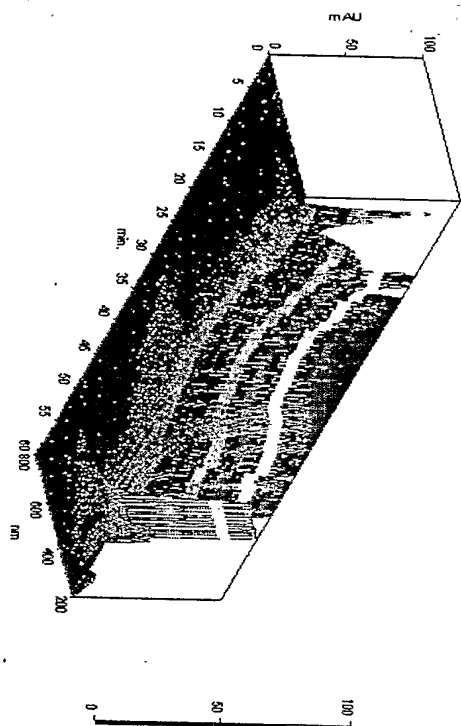


Officer.
(RVP/5/15)

DICHROMATOGRAPHIC DATABASE OF MEDICINES SINGLE MEDICINE: GUGGULU (THREE TIMES REFINED)

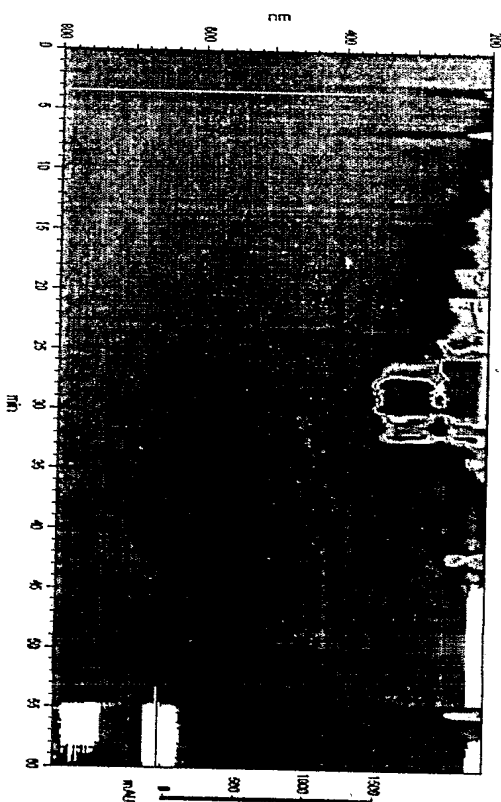
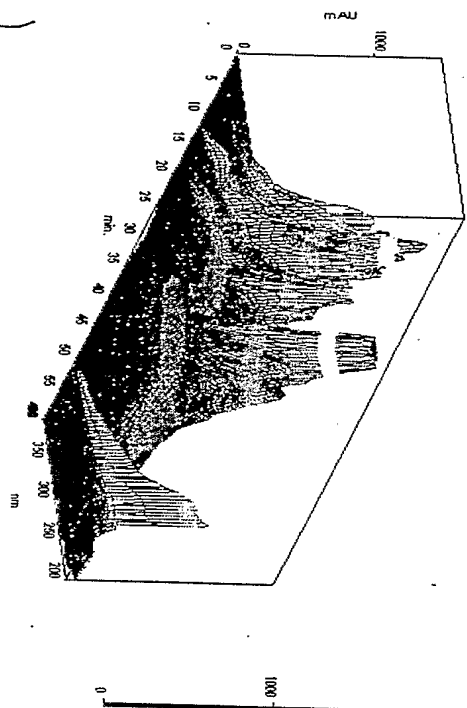
FINGER PRINTS OF KASAYANA DRAVYAS - STHOULYA (3)

FIG 24



MAHISHAKSHA GUGGULU

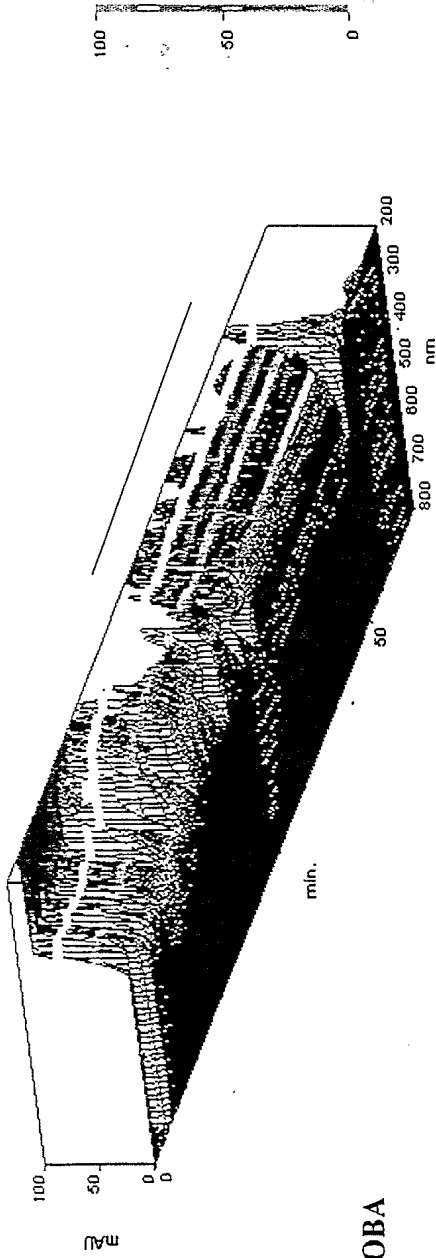
DAND 14VR INORGSHILAIT HARD del



(Dr V D Sinha)
SHILAJIT

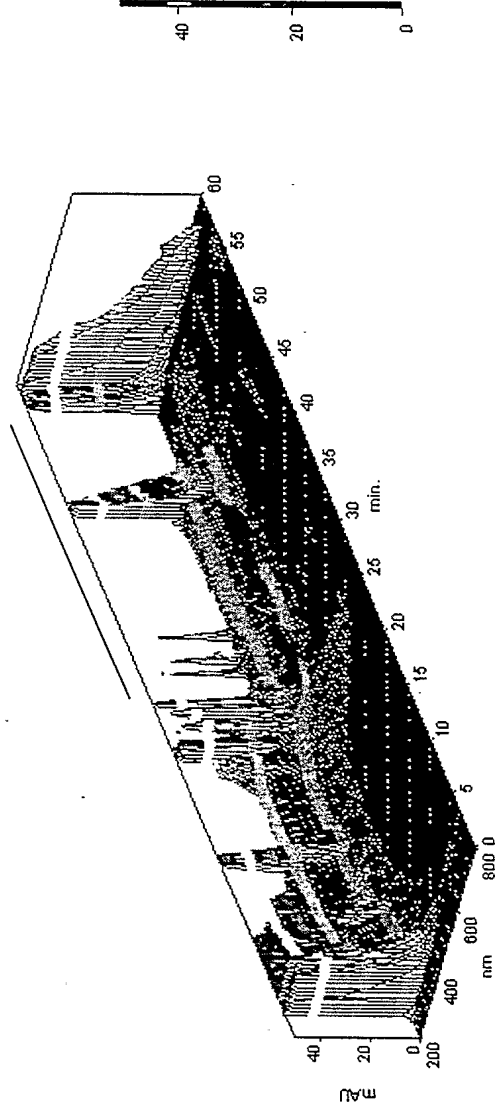
RASAYANA DRAVYAS (4)

DA FORMULATIONS1. GINKGO BILOBA



GINGKO BILOBA

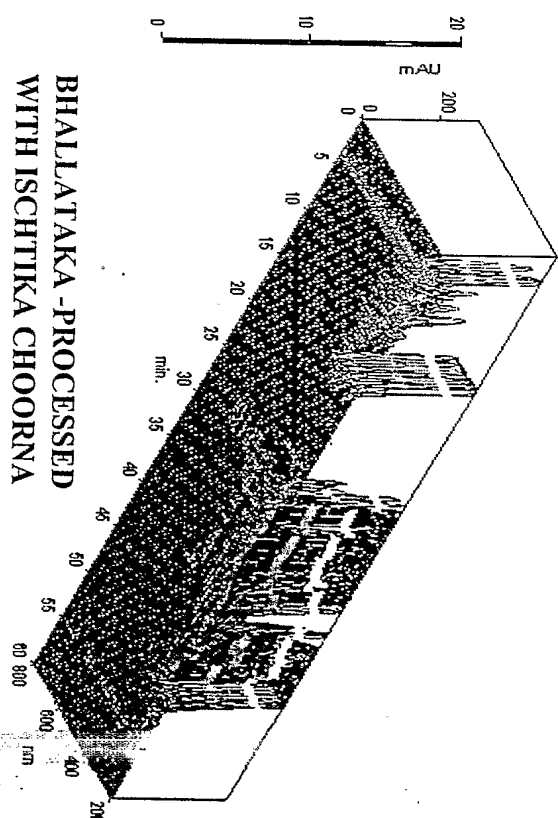
E:CHROMATOGRAPHIC DATABASE OF MEDICINESINGLE MEDICINES1. ASWAGANDHA (WITHANIA SOMNIFERA)



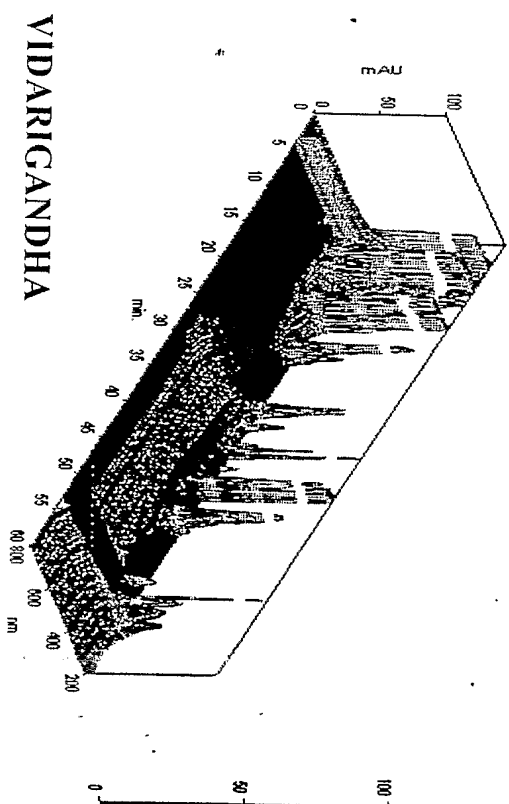
ASWAGANDHA (WITHANIA SOMNIFERA)

(Signature)
RVP Shinde

FIG 26



BHALLATAKA-PROCESSED WITH ISCHTIKA CHOORNA

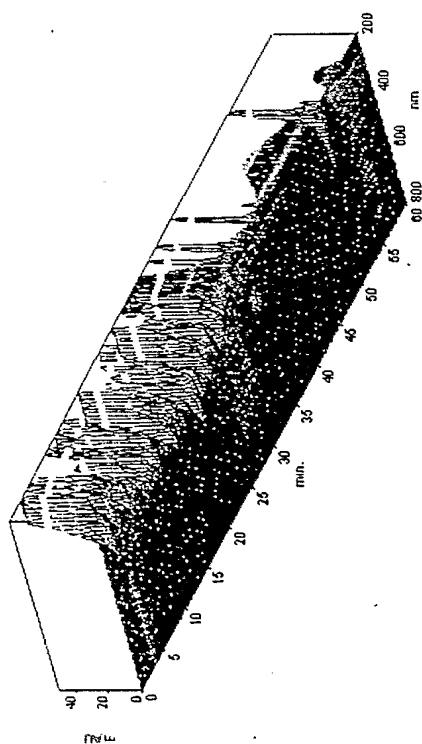


VIDARIGANDHA

FINGERPRINTS OF DIFFERENT SOURCES OF BOERRHAVIA SPECIES (PUNARNAVA)

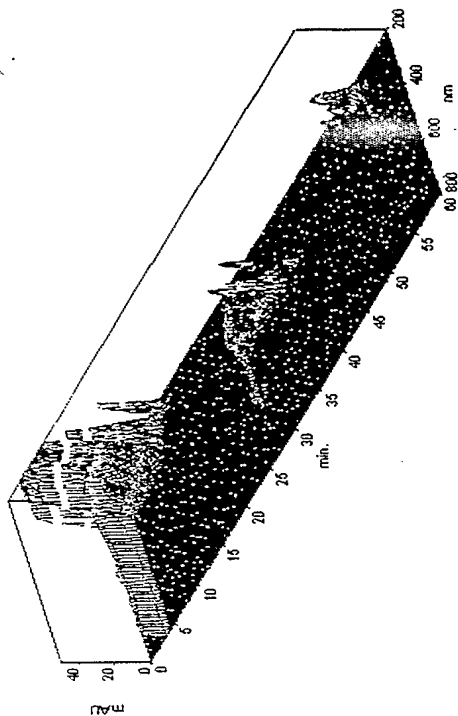
FIG 27

F1: CHROMATOGRAPHIC DATABASE OF MEDICINES IN THE MEDICINES 1 BOERRHAVIA DIFFUSA



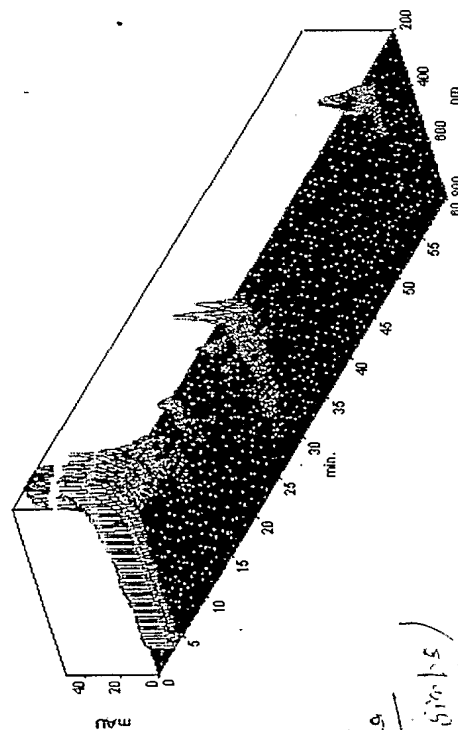
BOERRHAVIA DIFFUSA - SOURCE 1

C1: CLASS-VP1: RAKTA PUNARNAVA ARIAL PARTS



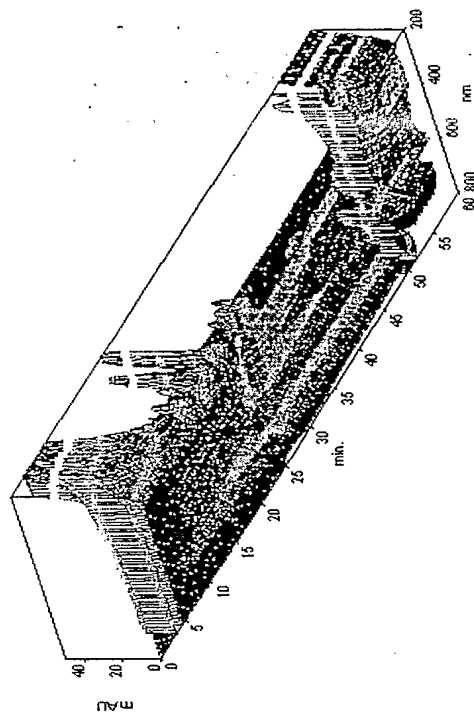
BOERRHAVIA DIFFUSA - SOURCE 2

C1: CLASS-VP1: BOERRHAVIA SPECIES



BOERRHAVIA SPECIES - SOURCE 3

C1: CLASS-VP1: BOERRHAVIA SPECIES

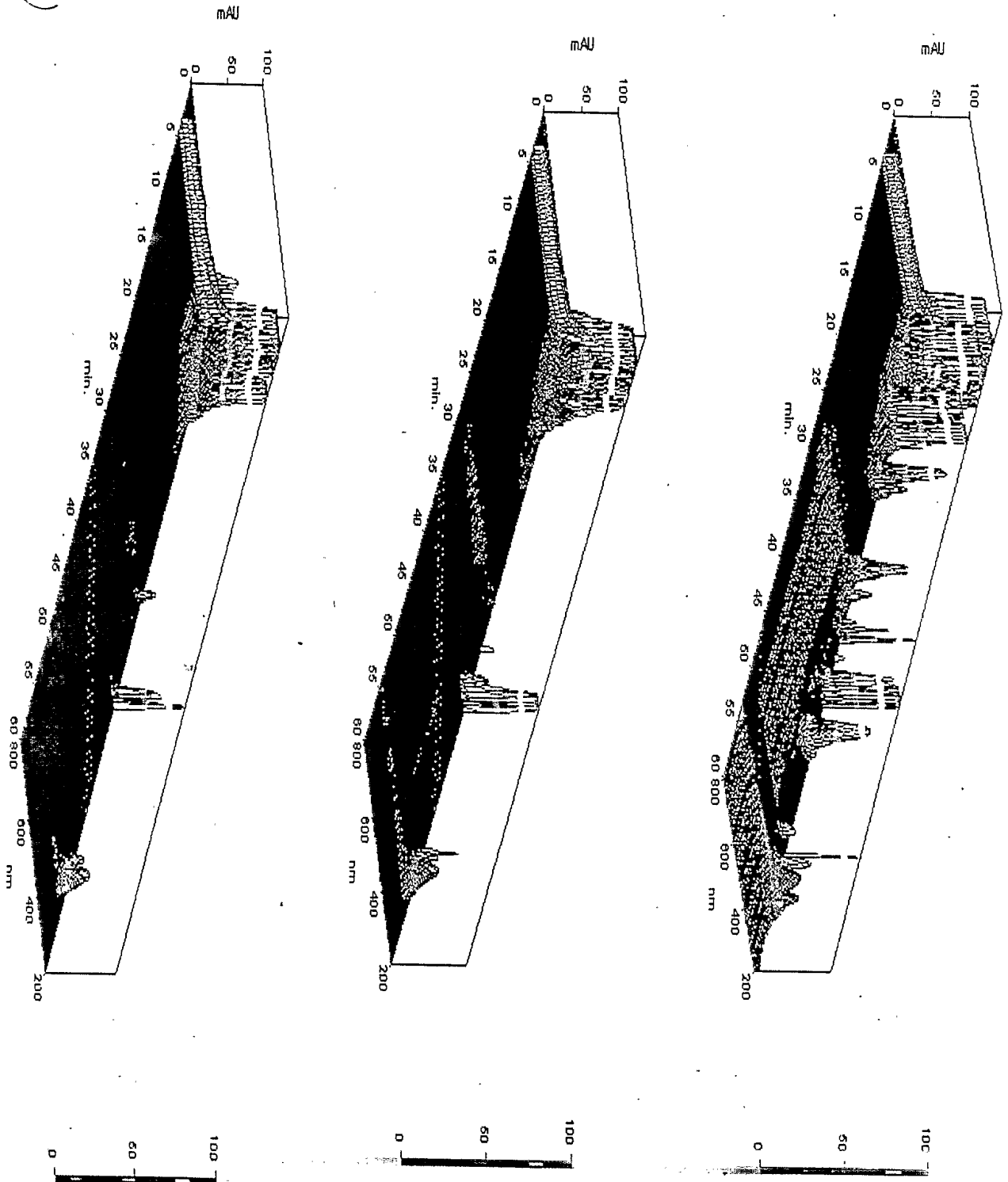


BOERRHAVIA SPECIES - SOURCE 4

Dr. R. V. S. S. S.
(RVP-15)

FINGERPRINTS OF DIFFERENT SOURCES OF VIDARIGANDHA

FIG 28

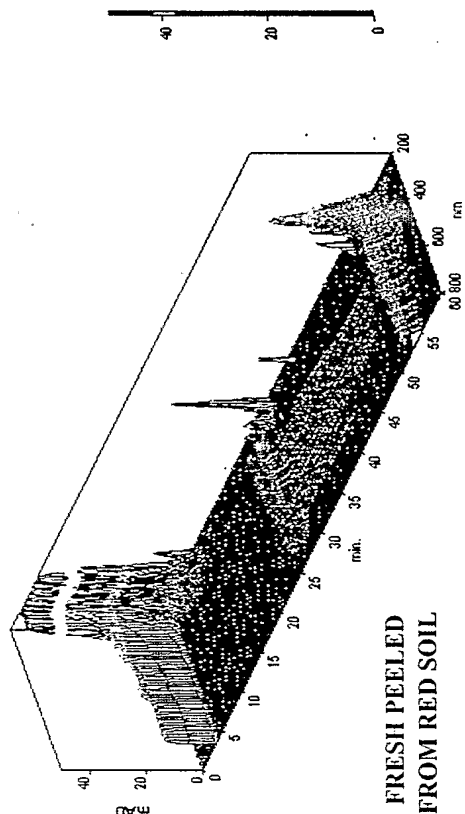


Dr. S. K. S. K.
(RVPS/Le)

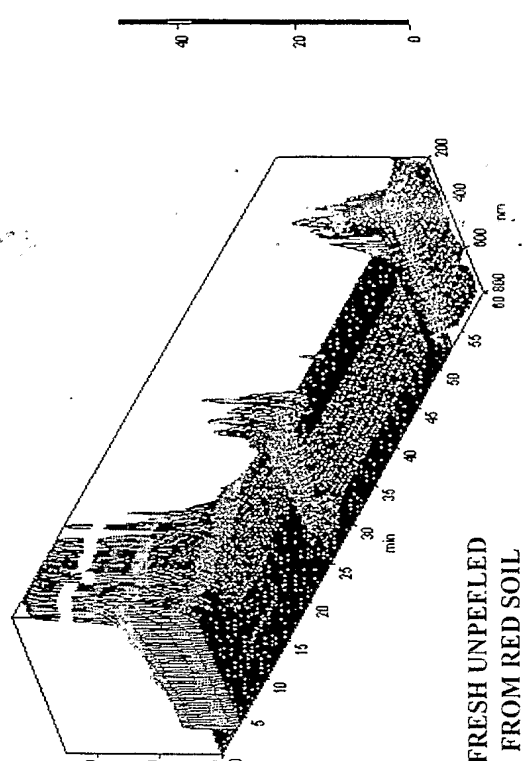
FINGER PRINTS OF AMRA GANDHA HARIDRA (CURCUMA AMADA)

FIG 29

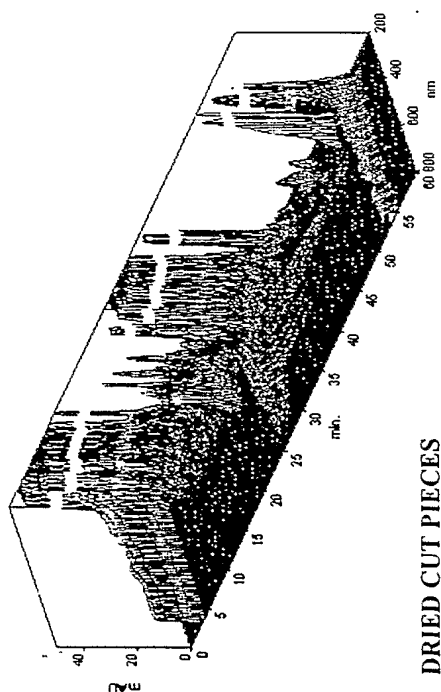
C:\CLASS-VP11 09 11 AMRA GANDHA HARIDRA FRESH PEELED



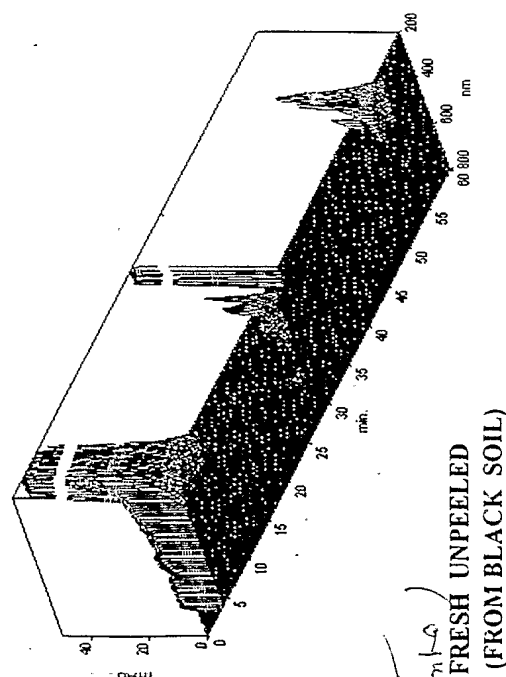
C:\CLASS-VP11 AMRAGANDHA HARIDRA FRESH UNPEELED



C:\CLASS-VP11 AMRA GANDHA HARIDRA (DRIED CUT PIECES)



C:\CLASS-VP11 AMRA GANDHA HARIDRA FRESH

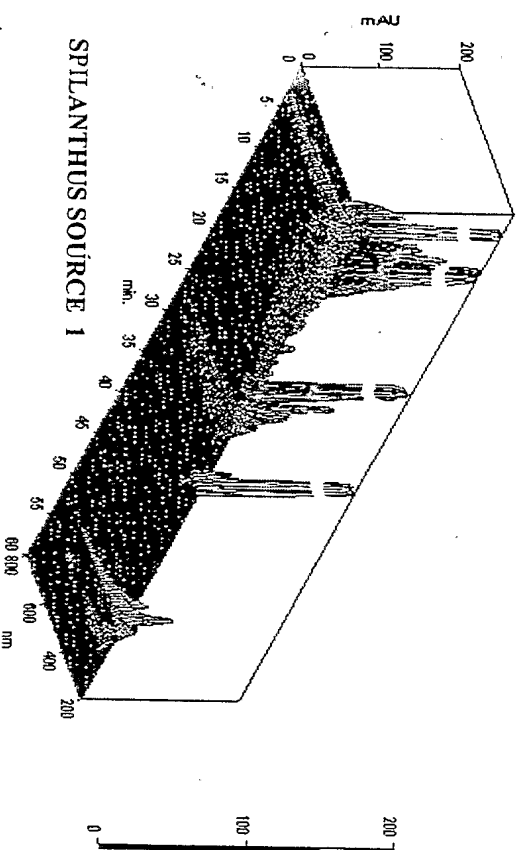


Amra
(RVP Sinter)

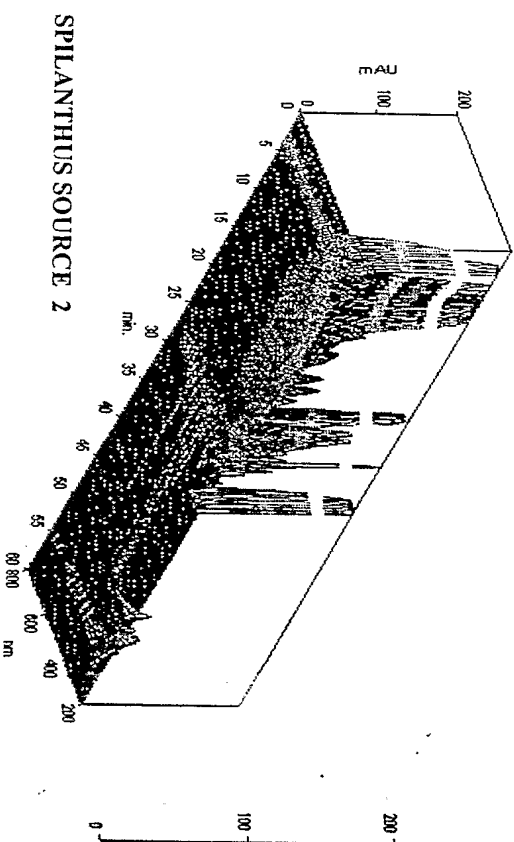
FINGERPRINTS OF DIFFERENT SOURCES OF AKARAKARABHA

FIG 30

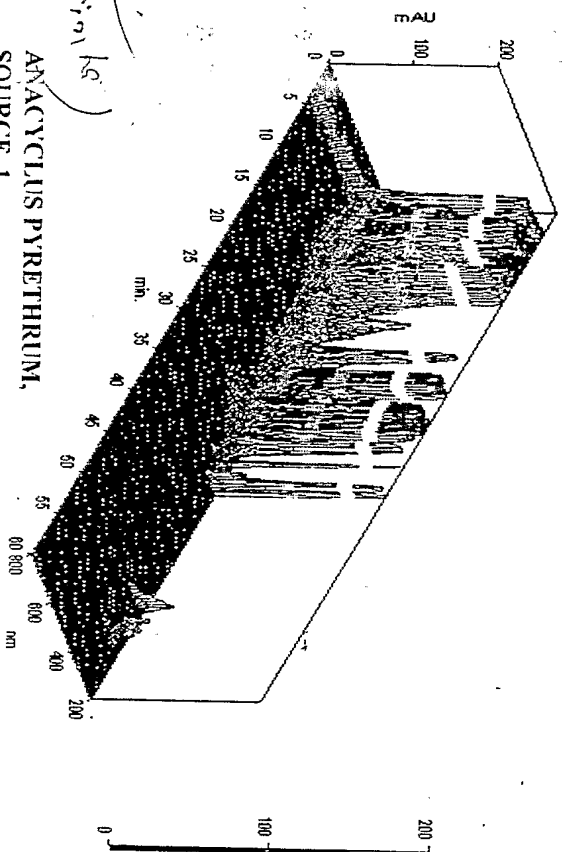
H11 AKARAKARABHA



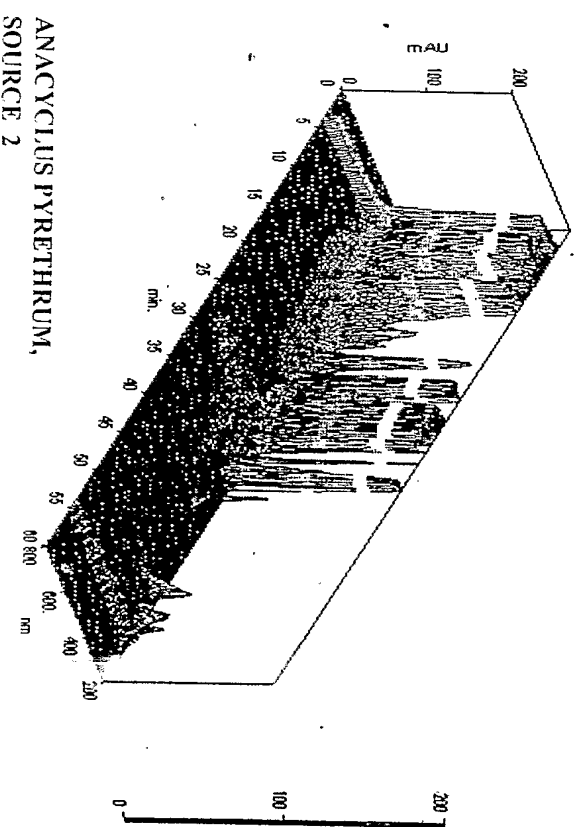
H11 AKARAKARABHA



H11 AKARAKARABHA



H11 AKARAKARABHA ROOTS



ANACYCLUS PYRETHRUM,
SOURCE 1

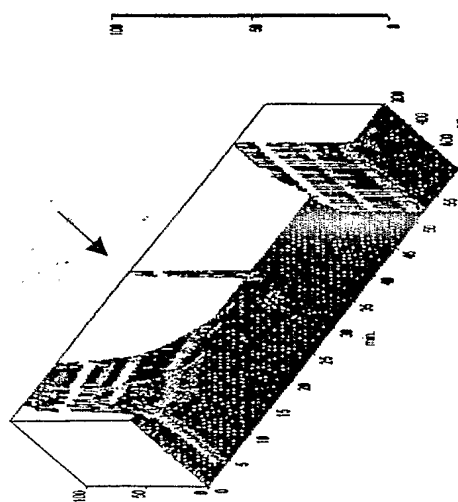
ANACYCLUS PYRETHRUM,
SOURCE 2

Dr. K. S. Srinivas
(RVP Srinivas)

FIG 31

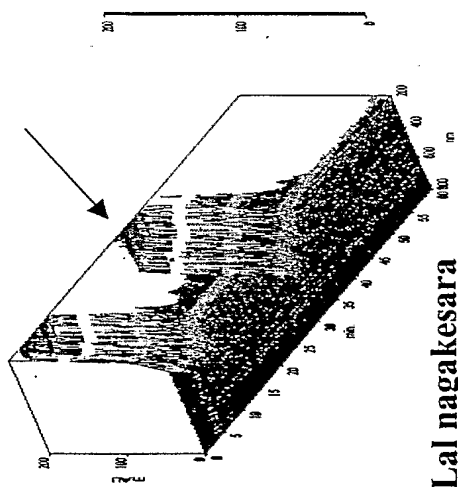
MEDICINES USED FOR FERTILITY

HPL-SEEMUTHA-ROOT COLLECTED ON KARTHIKA POUYANAM



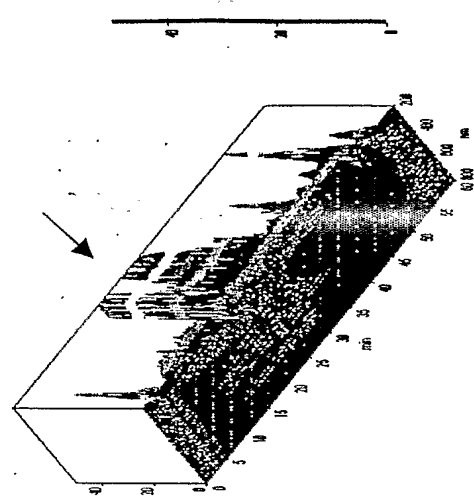
Jeemutha (Karthika Pournima)

O-CHROMATOGRAPHIC DATABASE OF MEDICINES IN THE MEDICINES LAL NAGAKESARA



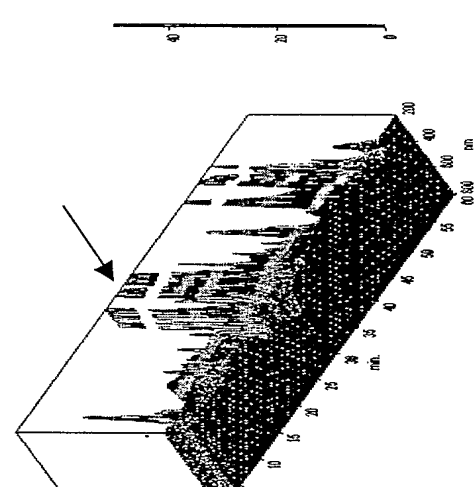
Lal nagakesara

O-CHROMATOGRAPHIC DATABASE OF MEDICINES IN THE MEDICINES LAL NAGAKESARA



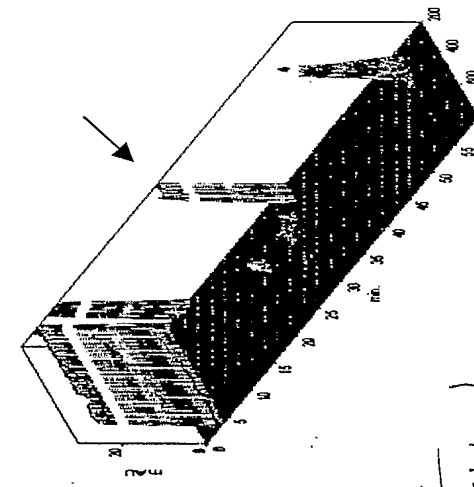
Ethyl Estrodiol

O-CHROMATOGRAPHIC DATABASE OF MEDICINES IN THE MEDICINES LAL NAGAKESARA



Norgesterol

O-CHROMATOGRAPHIC DATABASE OF MEDICINES IN THE MEDICINES LAL NAGAKESARA



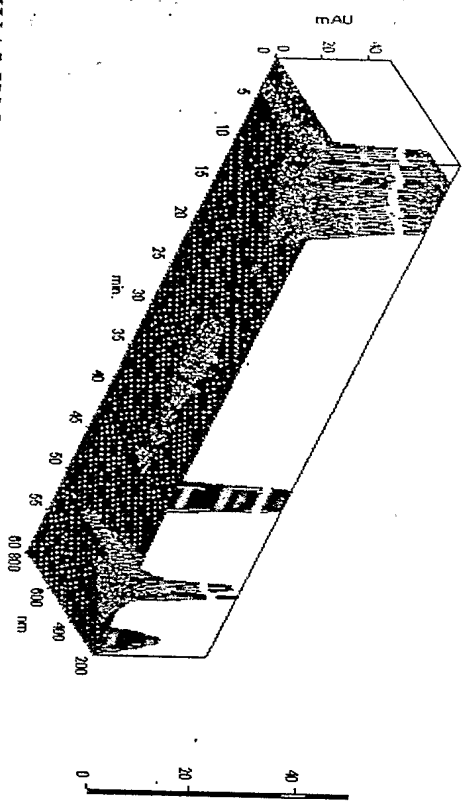
Progesteron

(RIP Simha)

MEDICINES USED FOR PUMSAVANA

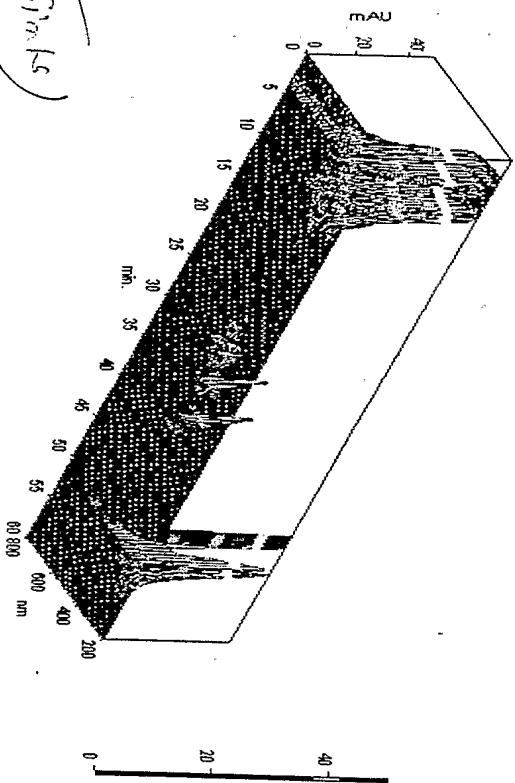
FIG 32

H.M. SHIVALINGI RIPPED FRUIT SKIN



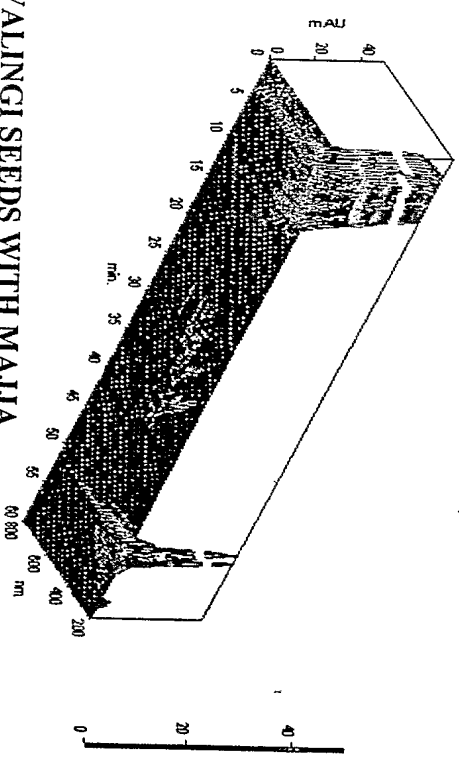
SIVALINGI FRUIT SKIN

H.M. SHIVALINGI RIPPED FRUIT WHOLE



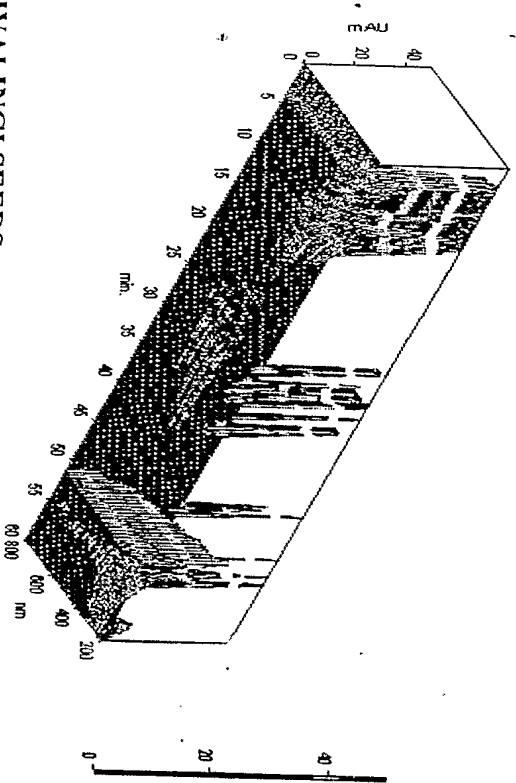
SIVALINGI RIPPED WHOLE FRUIT

H.M. SHIVALINGI SEEDS WITH MAJJA



SIVALINGI SEEDS WITH MAJJA

H.M. SHIVALINGI SEEDS



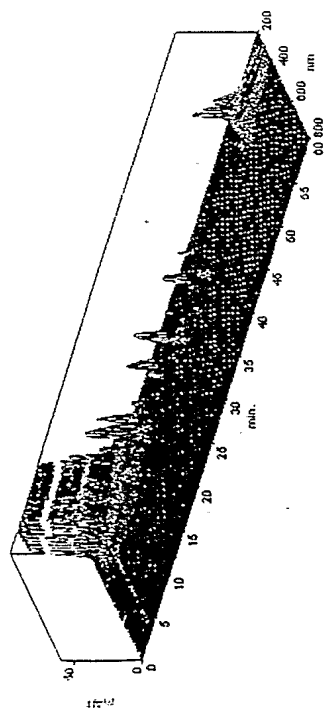
SIVALINGI SEEDS

Dr. V. S. S. S. S. S.
(Dr. V. S. S. S. S. S.)

FIG 33

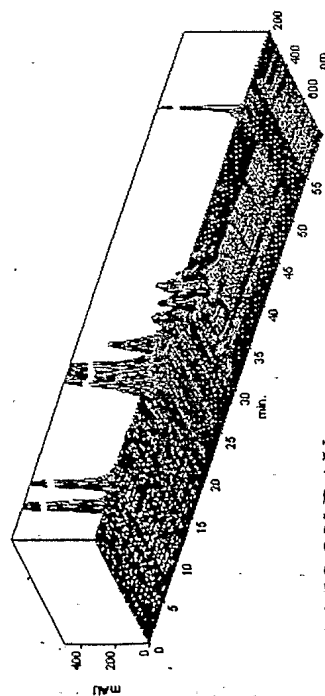
THE JEEMUTHA EXAMPLE

H1 SINGLE MEDICINES11 JEEMUTHA ROOT H1



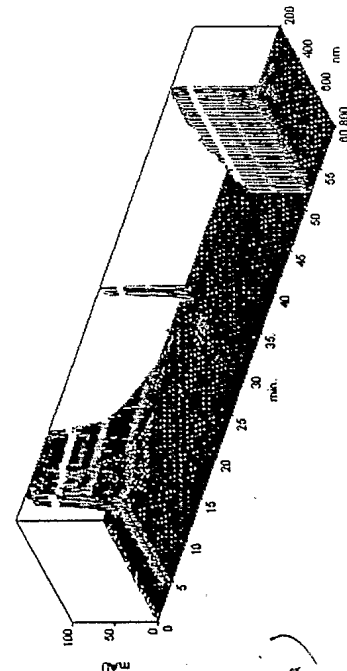
PUSHAYAMI NAKSHTRA

C1 CLASS-VP11 JEEMUTHA



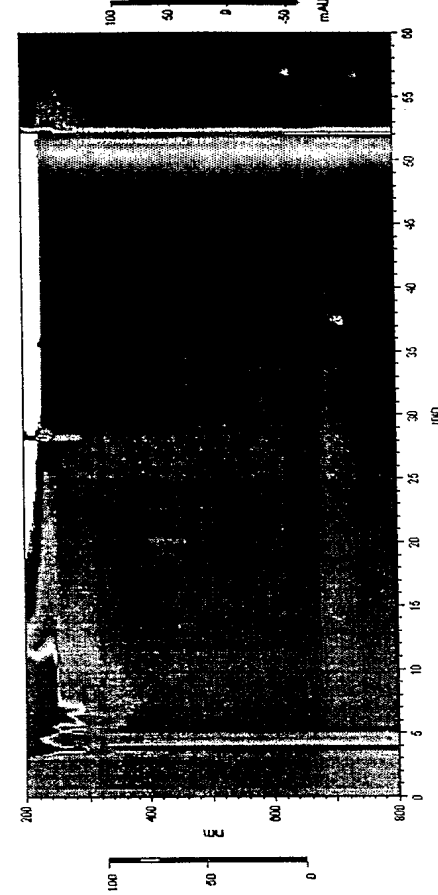
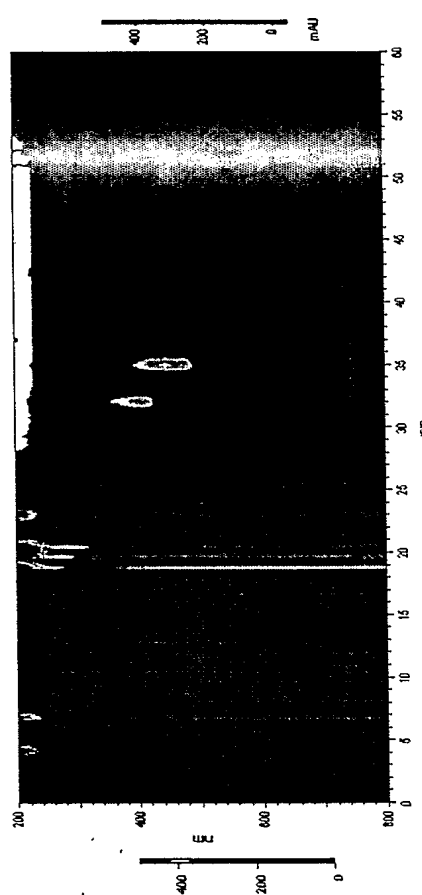
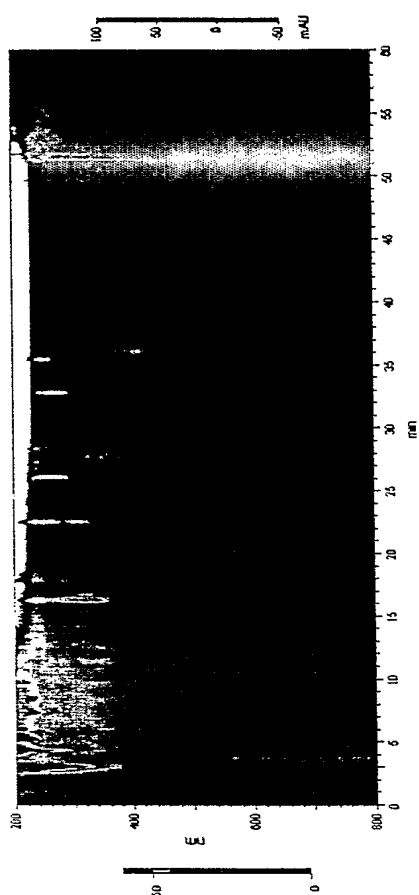
FULL MOON DAY

H11 JEEMUTHA ROOT COLLECTED ON KARTHIKA POURNAMI



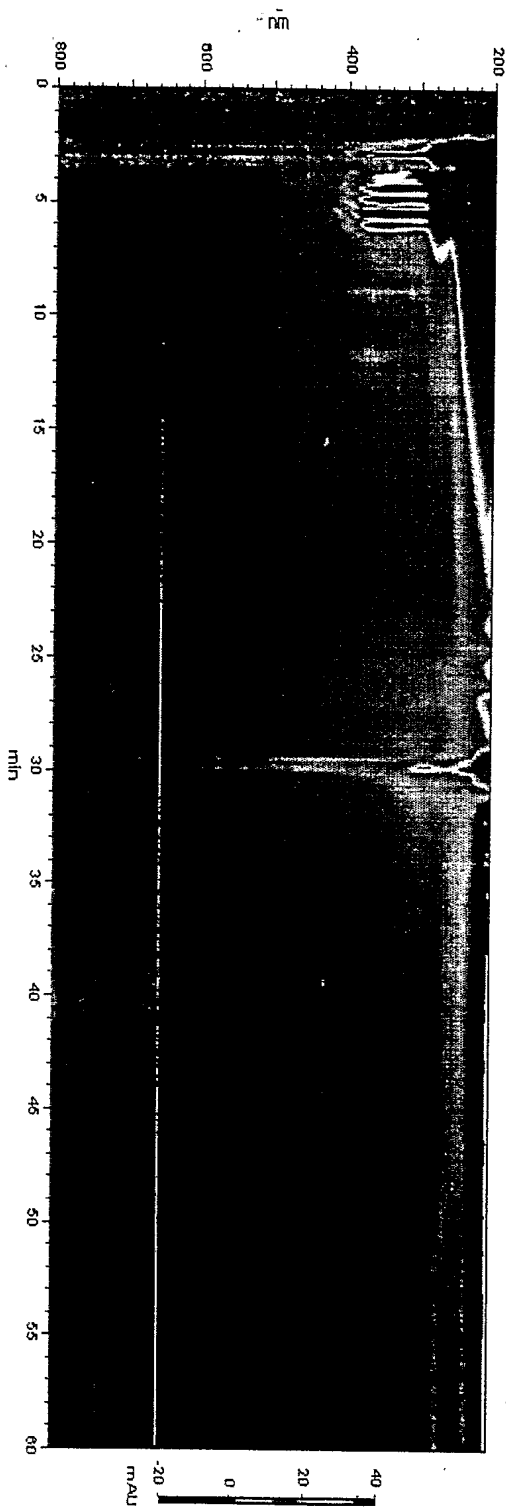
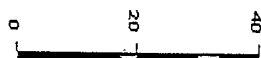
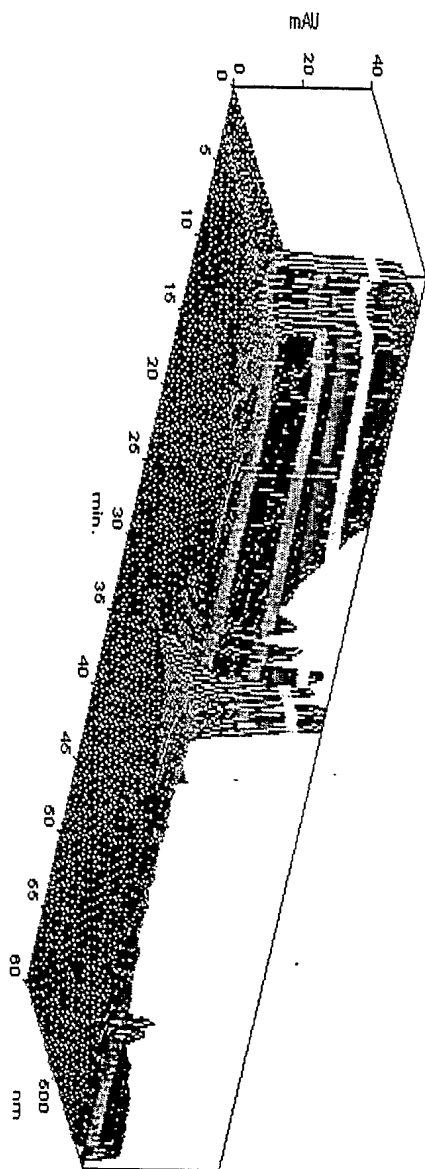
FULL MOON DAY OF KARTHIKA MASA

(RVP Sindhia)



FINGER PRINTS OF SEABUCK THORN EXTRACT HIPPOPHAE RHAMNOIDES

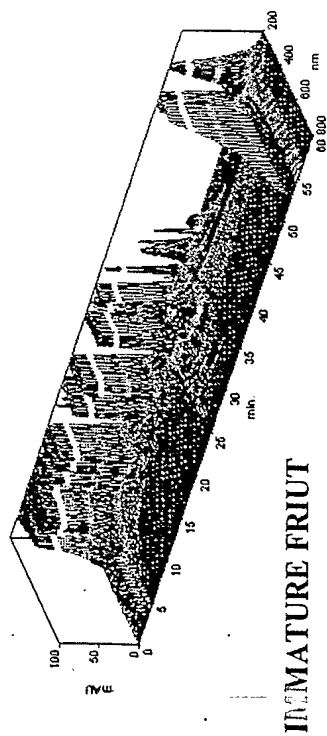
FIG 34



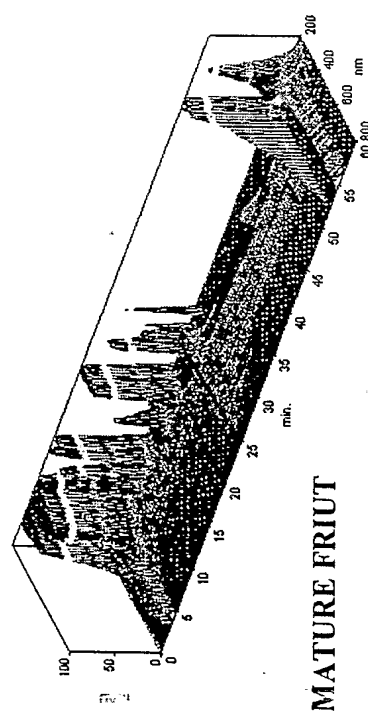
Opal

(RVP Shale)

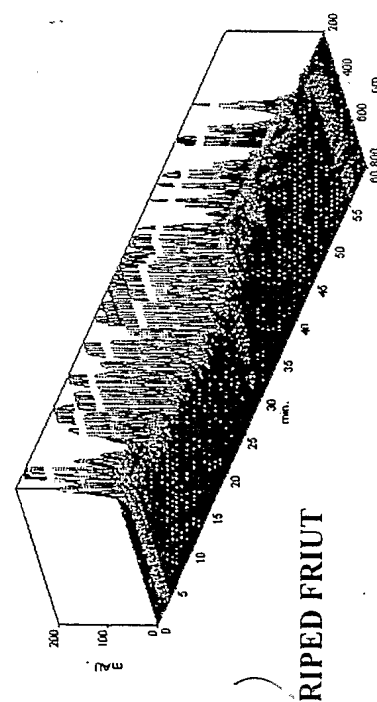
FIG 35



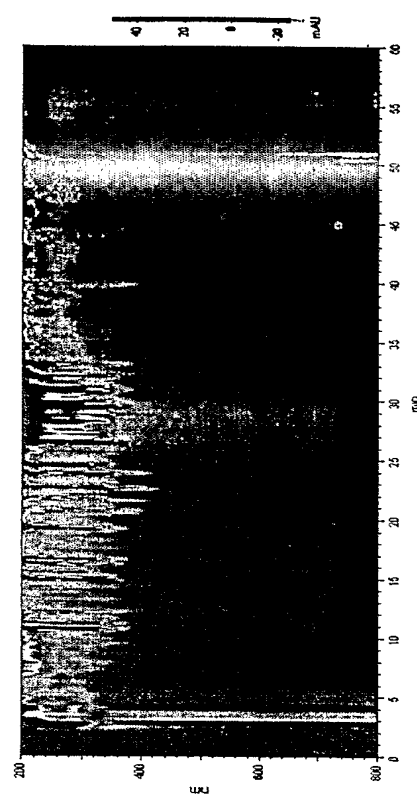
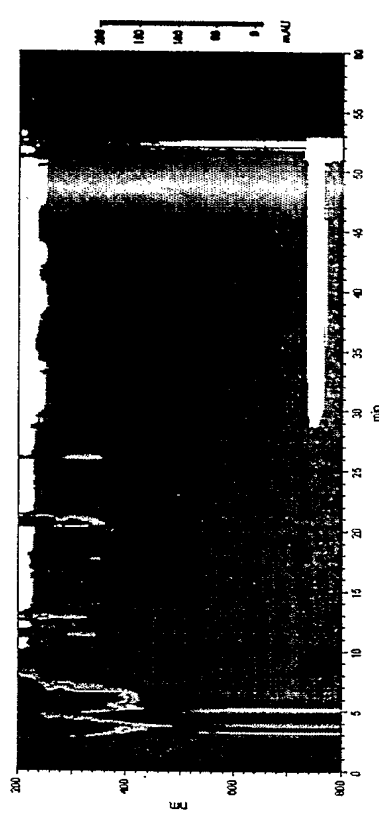
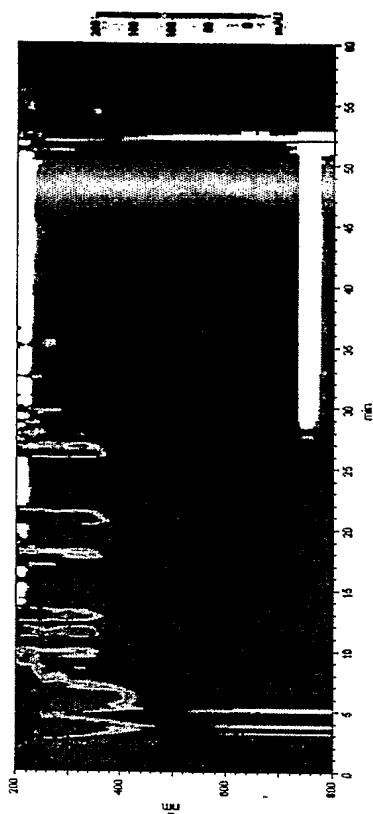
IMMATURE FRUIT



MATURE FRIUT

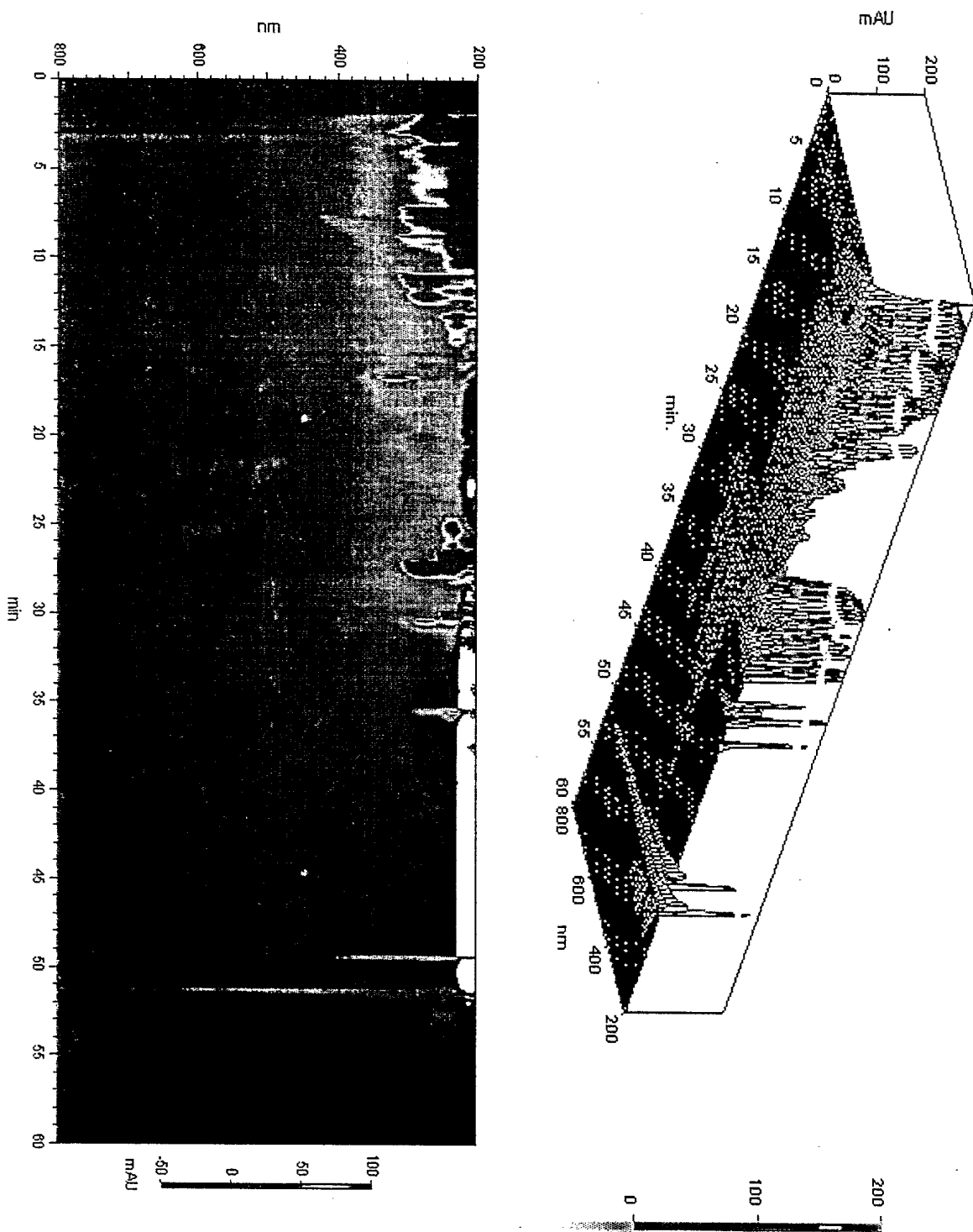


RIPED FRIUT



FINGERPRINTS OF MUDU VATTUKAL DRYNARIA QUERCIFOLIA (SIDHA MEDICINE)

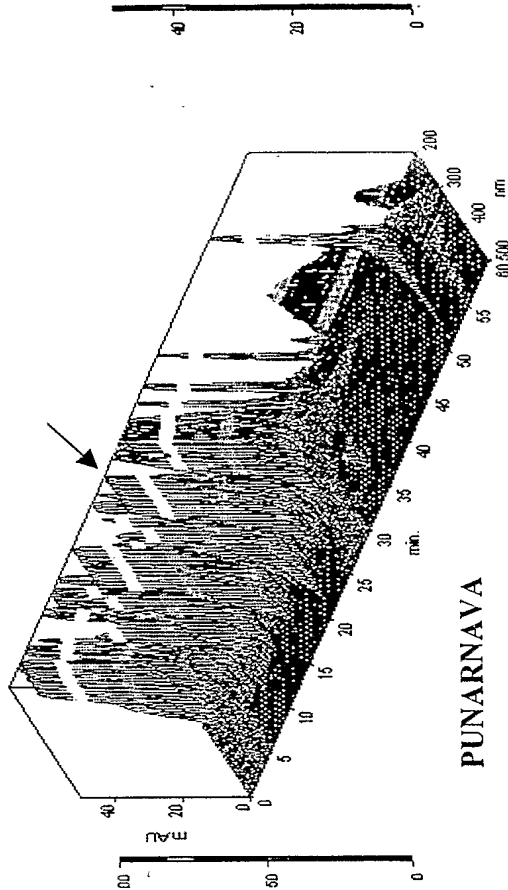
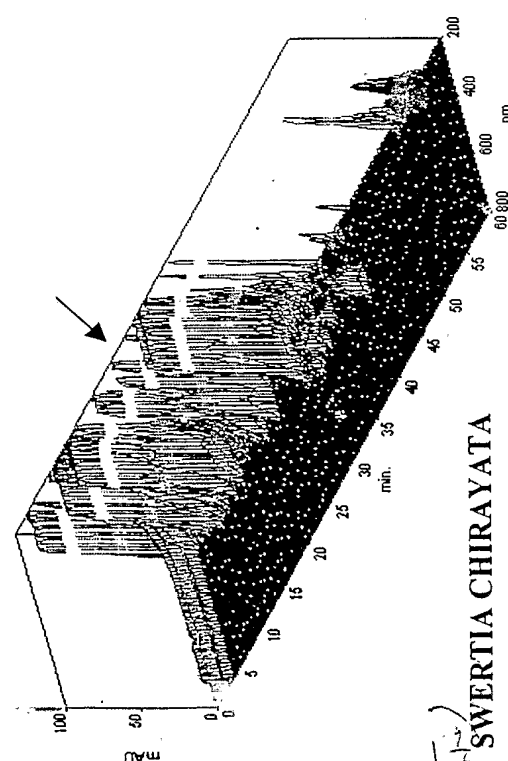
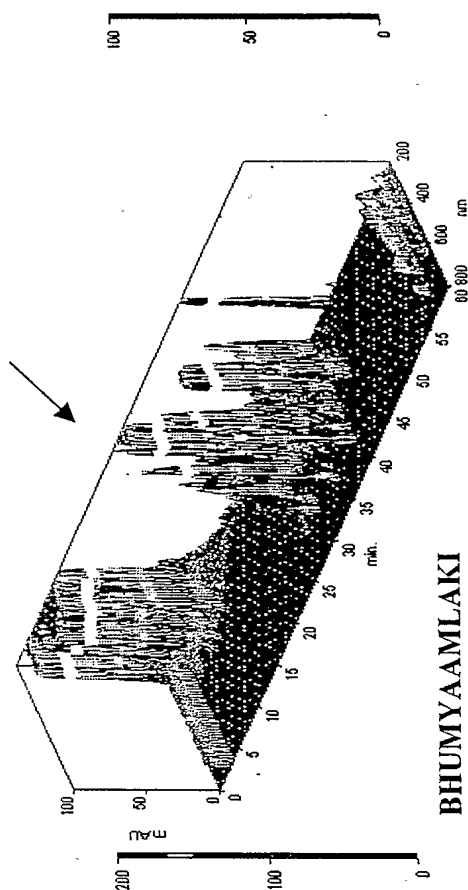
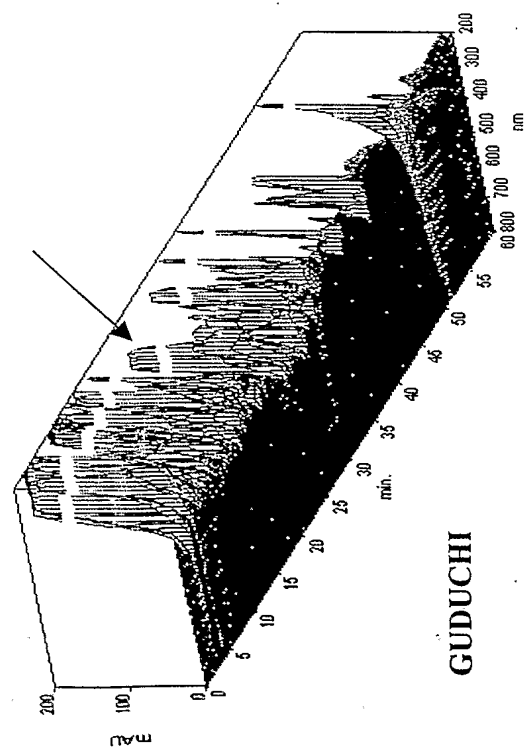
FIG 36



(Signature)
 RVP Sankar

SINGLE HERBS USED FOR HEPATITIS

FIG 37

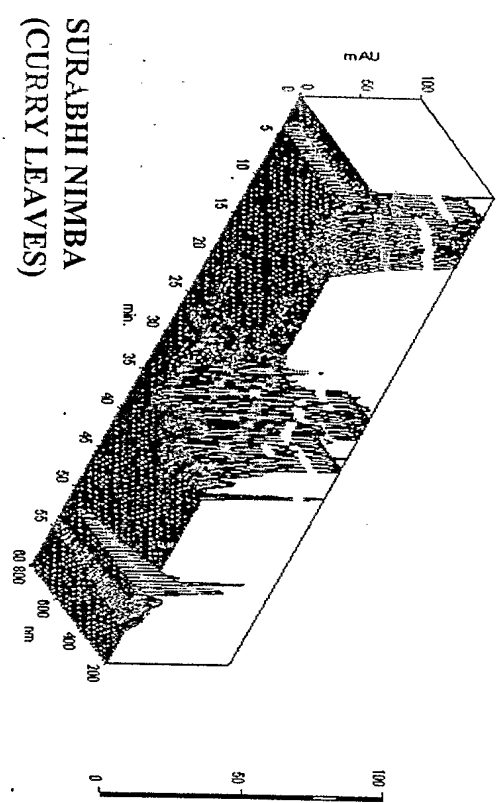


(Signature)
 (RVP Singh)

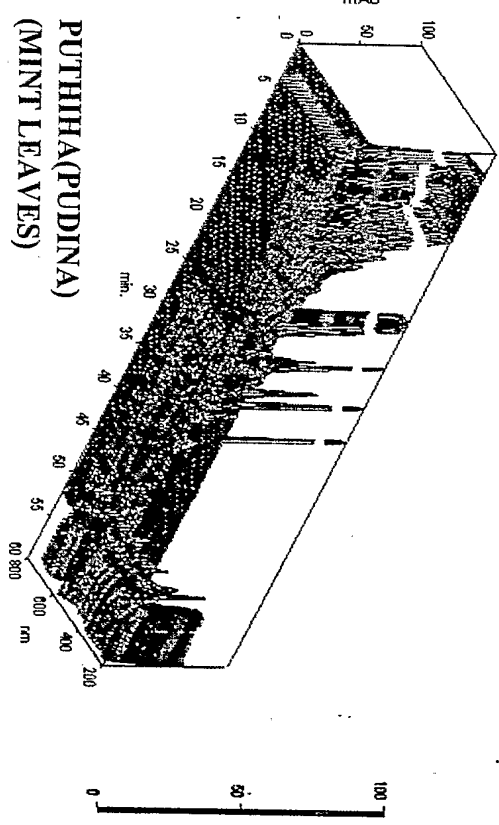
FINGER PRINTS OF LEAFY VEGETABLES (1)

FIG 38

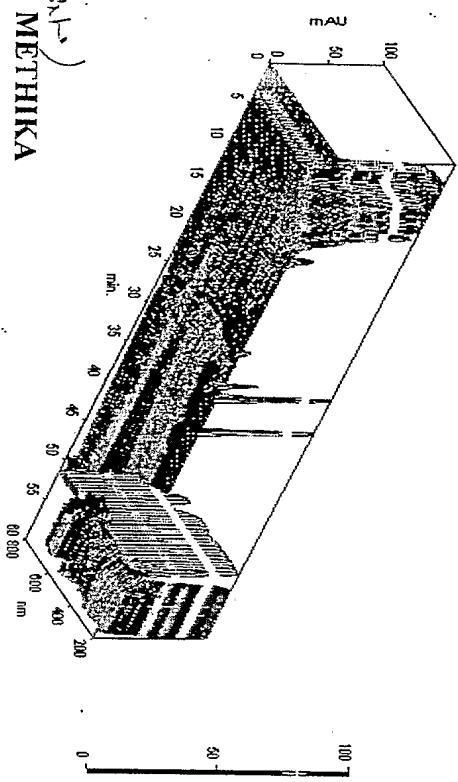
H11 SURABHI NIMBA FRESH LEAVES



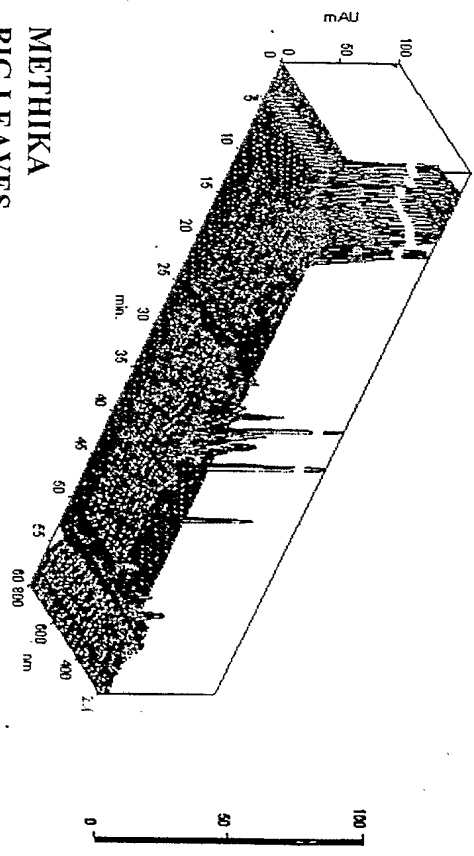
H1SINGLE MEDICINES1 PUDINA



H1SINGLE MEDICINES1 METHIKA SMALL LEAVES



H1SINGLE MEDICINES1 METHIKA BIG LEAVES



SURABHI NIMBA
(CURRY LEAVES)

PUTHIHA(PUDINA)
(MINT LEAVES)

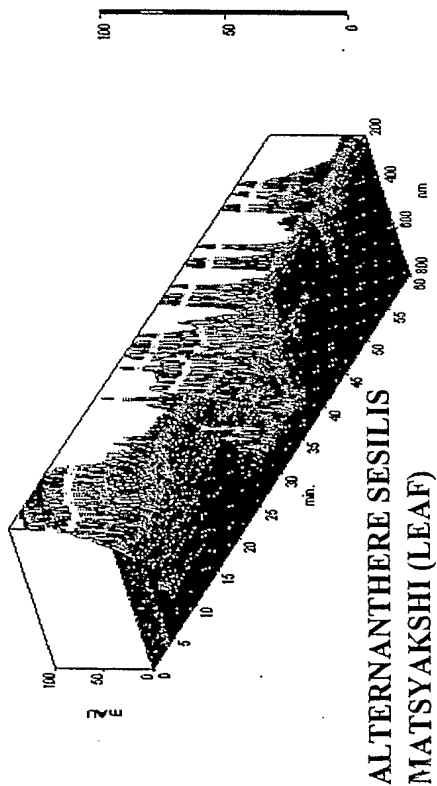
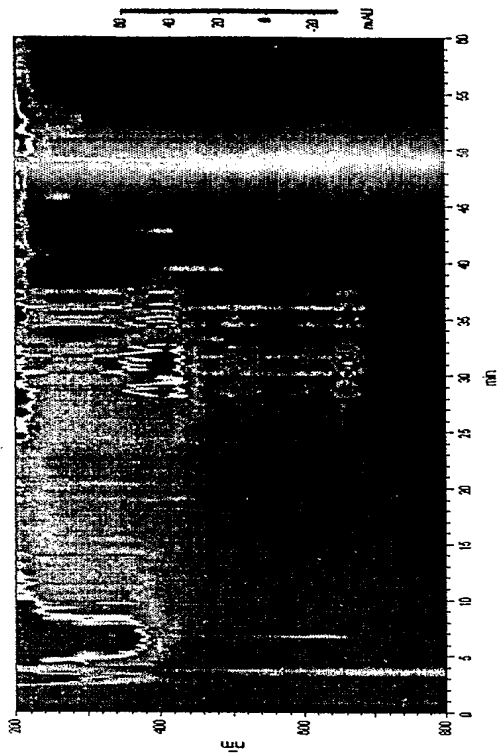
METHIKA
SMALL LEAVES

METHIKA
BIG LEAVES

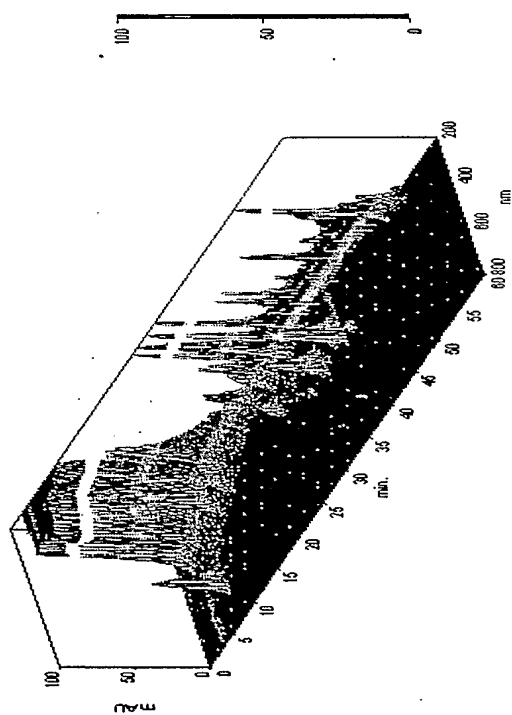
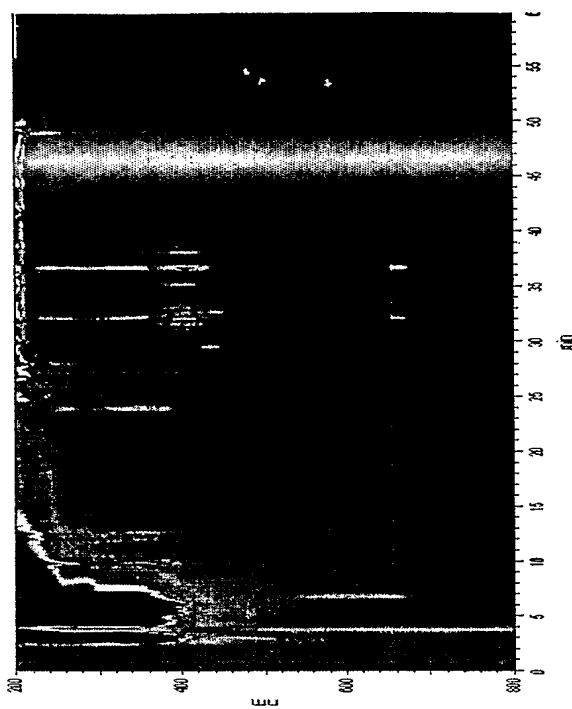
(Signature)
(R.N. Srinivas)

INDIAN LEAFY VEGETABLES (2)

FIG 39



ALTERNANTHERE SESILIS
MATSYAKSHI (LEAF)



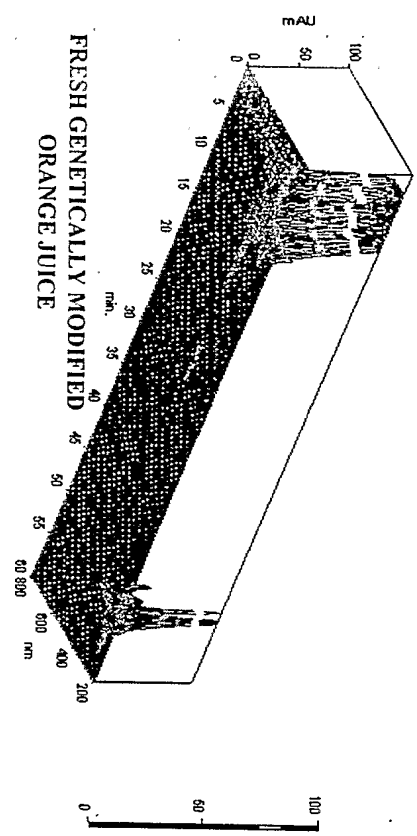
TAMARIND (TENDER LEAF)

(RVP Sinter)

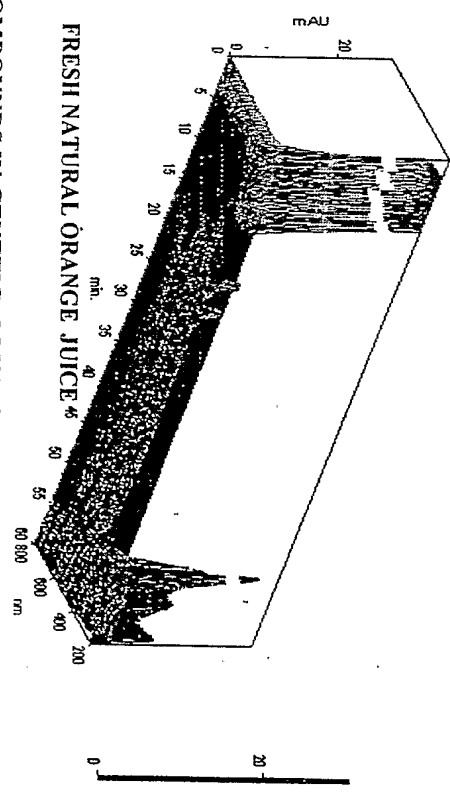
GENETICALLY MODIFIED FOODS IF THEY DO NOT CONTAIN THE PROPERTIES AS REPORTED IN THE TRADITIONAL LITERATURE WILL ACT WRONGLY AND IF ALL HERBAL MEDICINES ARE GENETICALLY MODIFIED THE TRADITIONAL PHILOSOPHIES WILL GO ERRATIC LEAVING THE COUNTRIES TO DEPEND ON THE MODERN MEDICINES MAKING HEALTH MANAGEMENT VERY COSTLY AND BECOME DEPENDENT

FIG 40

H.M. FRESH GENETICALLY MODIFIED ORANGE JUICE

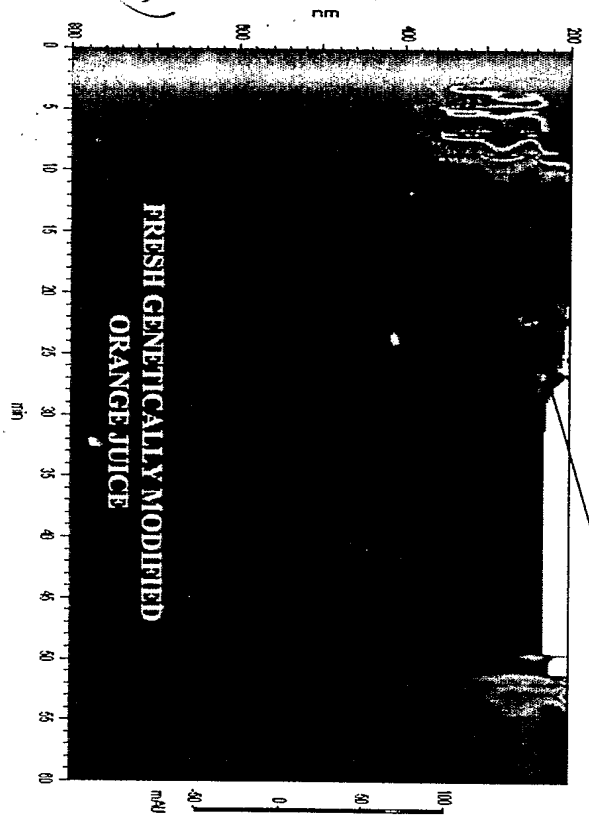


H.M. FRESH NATURAL CITRUS FRUIT JUICE (KAMALA)

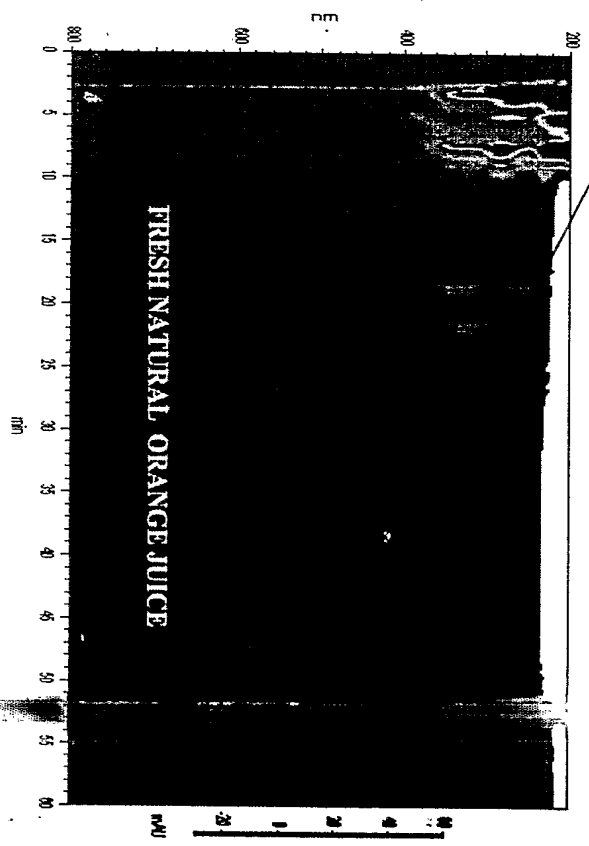


ABSENCE OF THERAPEUTICALLY ACTIVE COMPOUNDS IN GENETICALLY MODIFIED

FRESH GENETICALLY MODIFIED ORANGE JUICE



FRESH NATURAL ORANGE JUICE

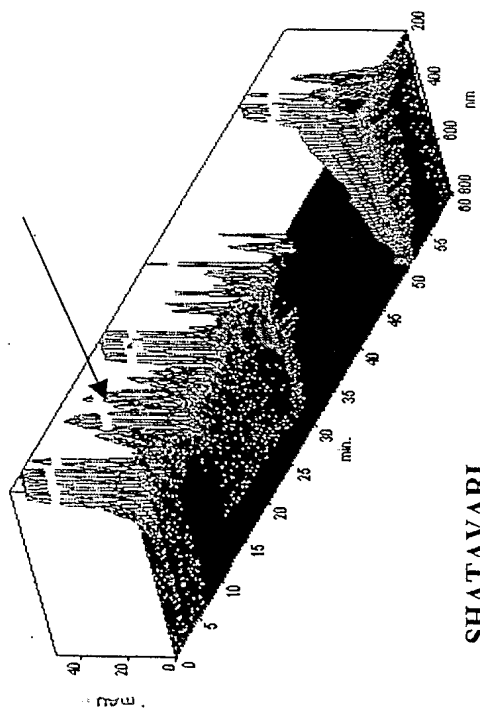


(Ramp Singh)

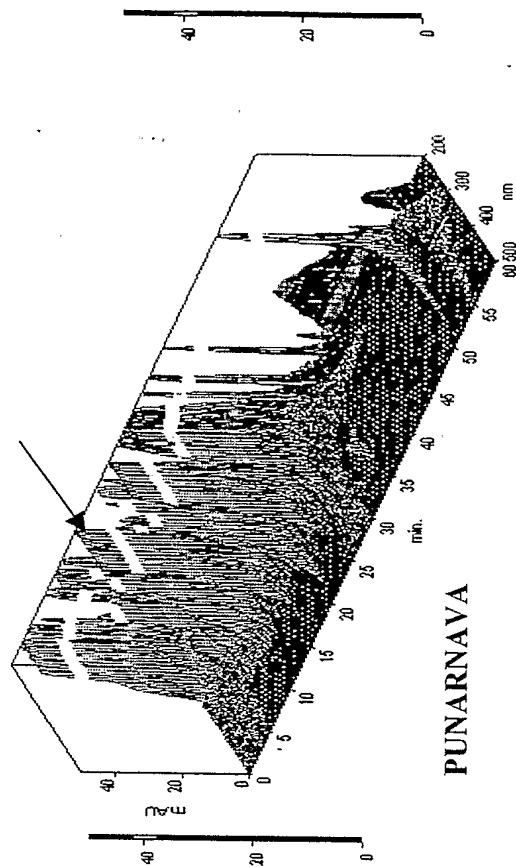
SINGLE MEDICINES USED FOR STRESS RELIEVING

FIG 41

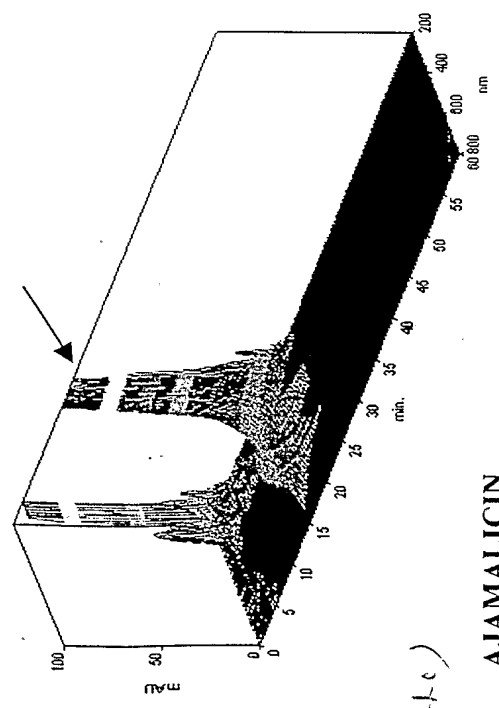
H:\SINGLE MEDICINES\1 PILLITTEGALU (ASPARAGUS RACEMOSUS)



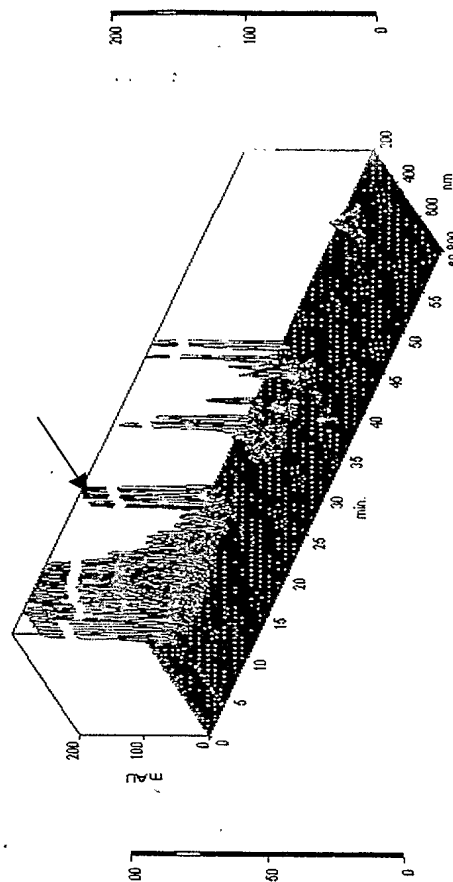
C:\CLASS\VP\data\1.BOERRHAVA DIFUSA ()



D:\ND 11A\111.AZAMALYCIN



C:\CLASS\VP\single medicines\1.KRISHNA TULASI (

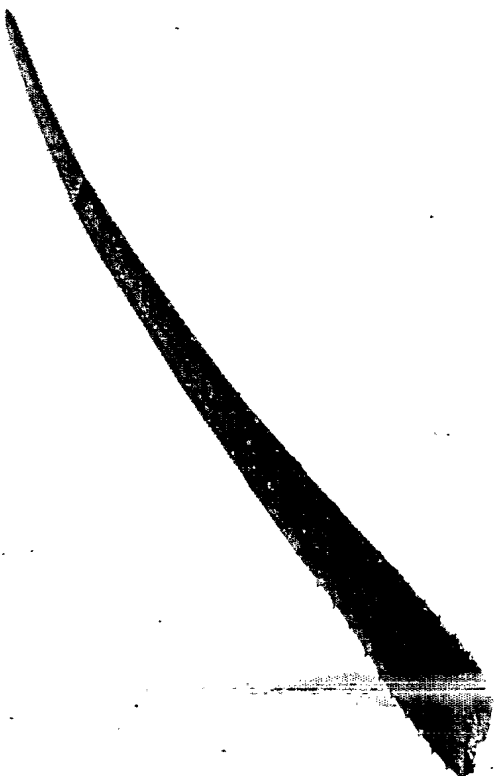
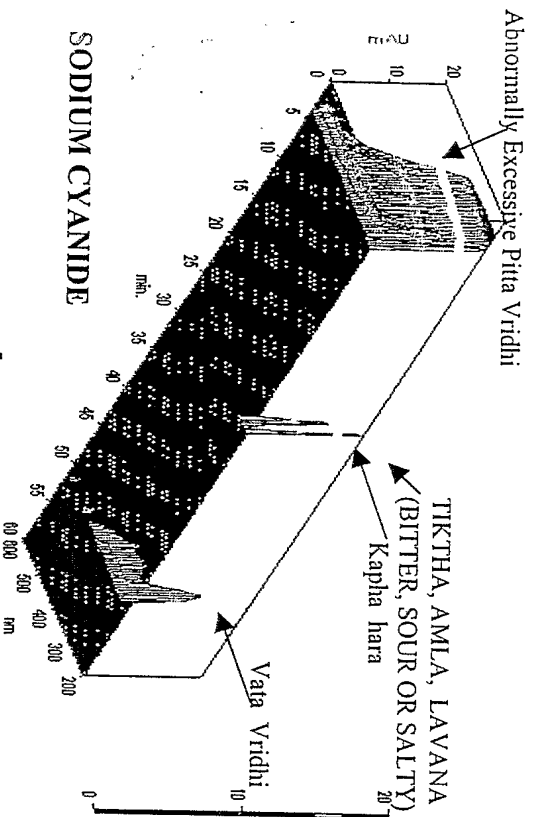


(Signature)
(2VP/2010-11)

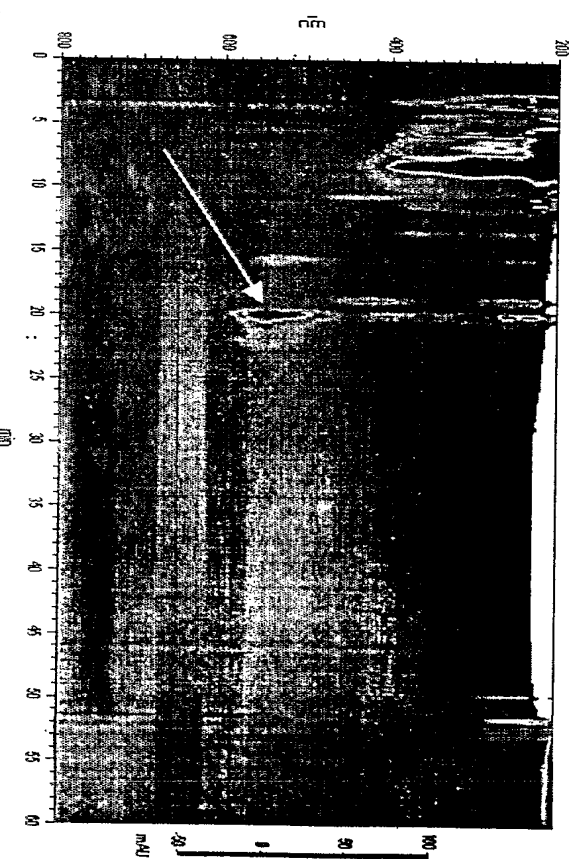
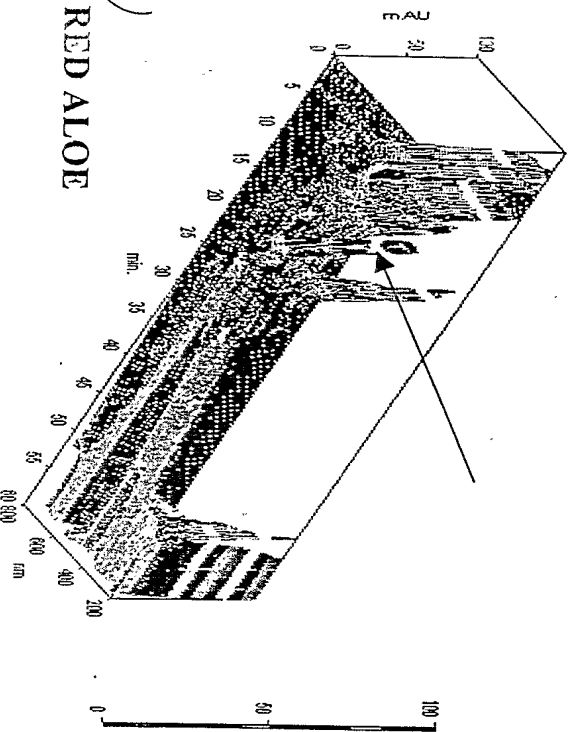
UNKNOWN PROPERTIES OF SOME MATERIALS

FIG 42

C:CLASS-VPI1 TOXIC COMPOUND



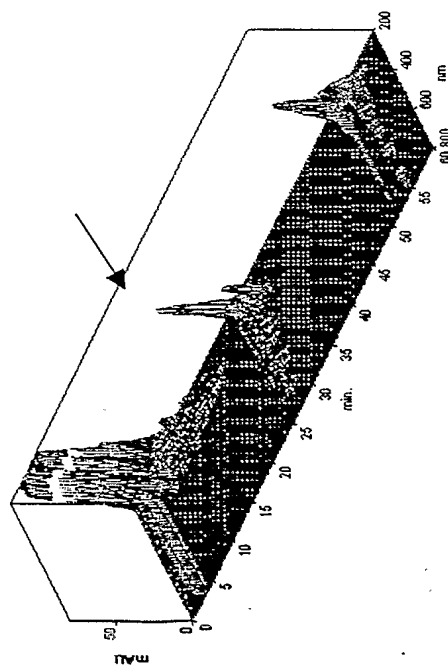
RED ALOE LEAF



Dr. S. L. Srinivas
(R.N.P. Srinivas)

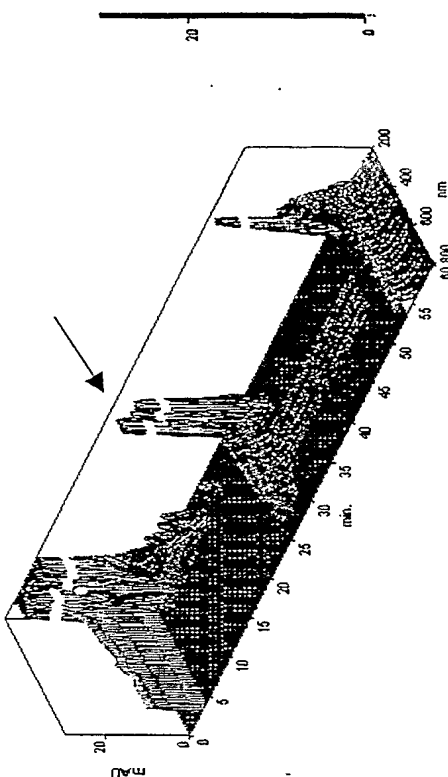
HERBAL MEDICINES USED FOR FEMALE INFERTILITY (I)

H\ LAKSHMANA\1 LAKSHMANA RHIZOME WITH MORE SPOTS



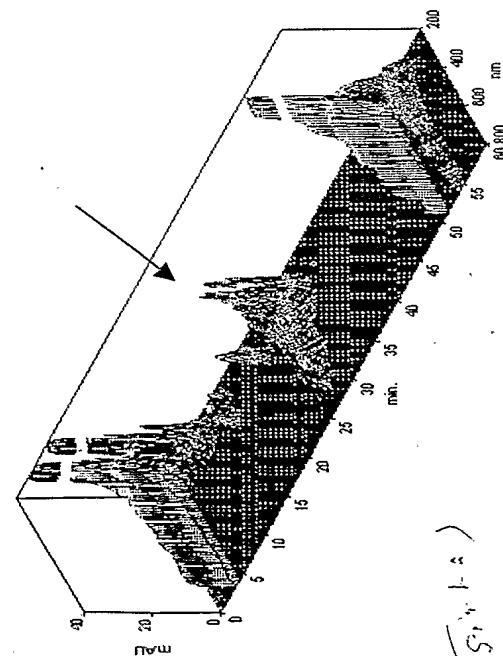
LAKSHMANA RHIZOME WITH MORE SPOTS

H\ LAKSHMANA\1 LAKSHMANA RHIZOME WITH LESS SPOTS (B)



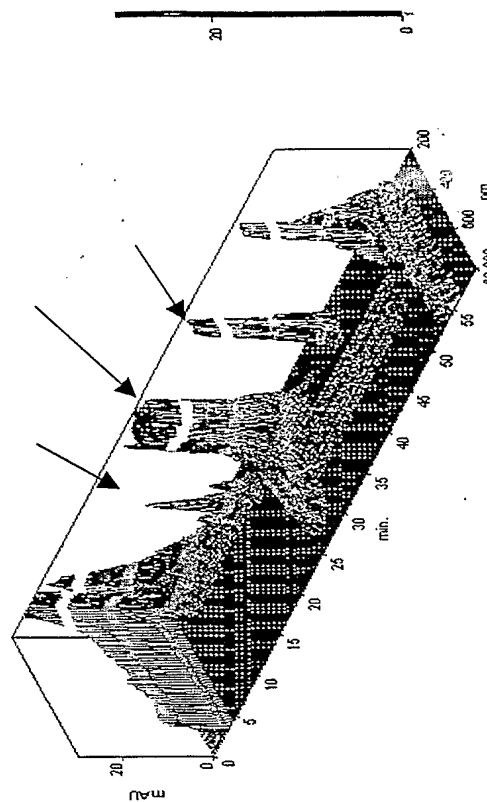
LAKSHMANA RHIZOME WITH LESS SPOTS

H\ LAKSHMANA\1 LAKSHMANA RHIZOME MILK TREATED



LAKSHMANA LOHA

H\ LAKSHMANA\1 LAKSHMANA RHIZOME MILK TREATED



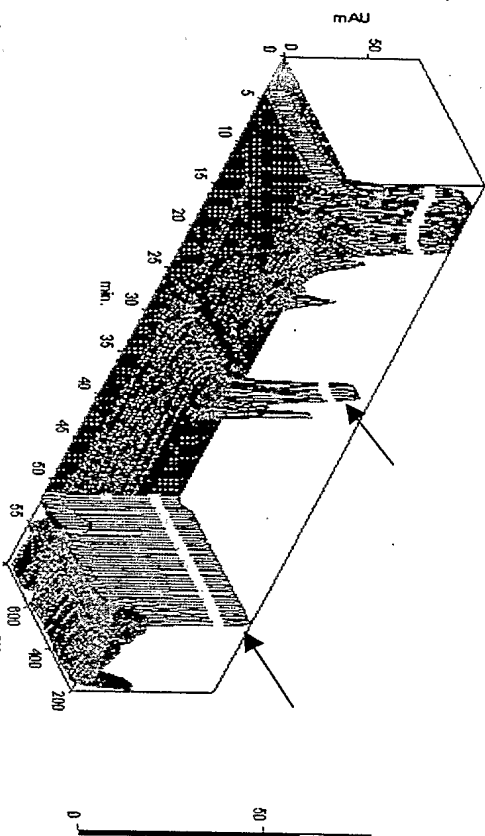
LAKSHMANA RHIZOME MILK TREATED

(
Rip
Sinha)

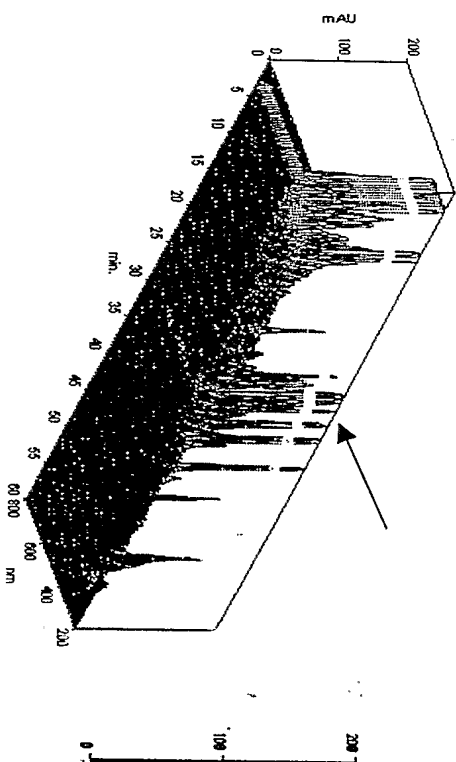
HERBAL MEDICINES USED FOR FEMALE FERTILITY (2)

FIG 44

HILAKSHMANANI LAKSHMANA SMALL RHIZOME CROWN PART MORE SPOTS

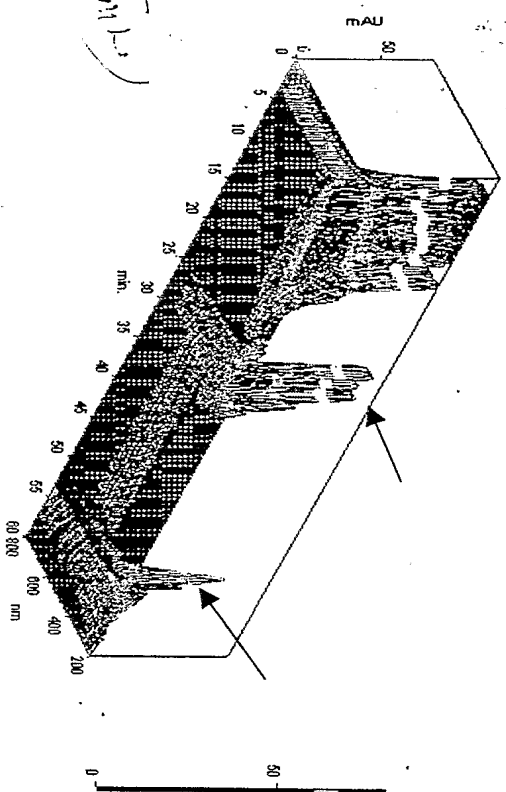


CICLASS-VPDASWASA SUDHARANI KANTAKARI



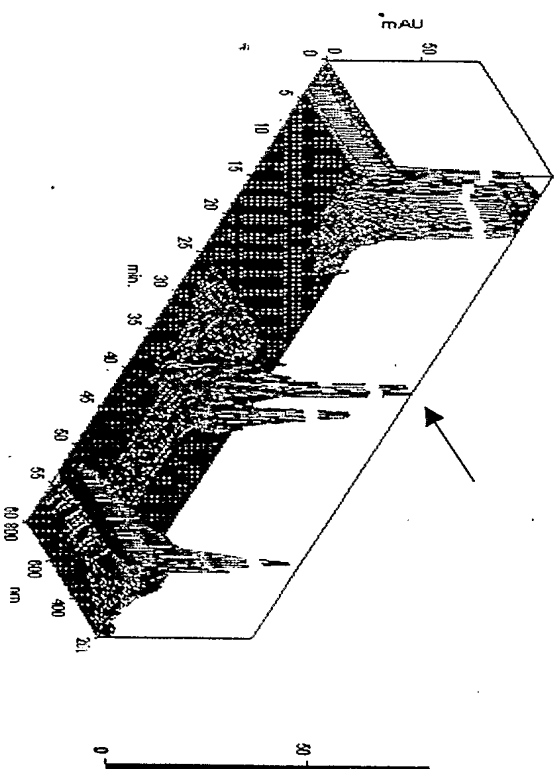
LAKSHMANA RHIZOME CROWN (MORE SPOTS)

HILAKSHMANANI LAKSHMANA BIG RHIZOME CROWN PART LESS SPOTS



KANTAKARI

HILAKSHMANANI LAKSHMANA LEAF WITH SMALL RHIZOME MORE SPOTS



LAKSHMANA RHIZOME CROWN (LESS SPOTS)

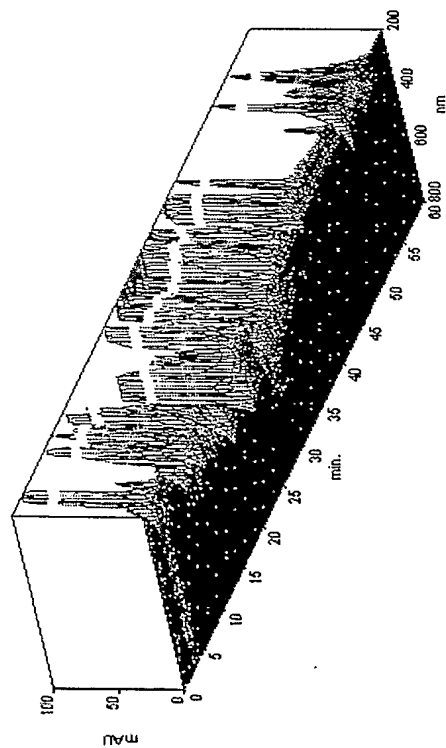
LAKSHMANA SMALL LEAF (MORE SPOTS)

Signature
(RNP SM-L-1)

FIG 45

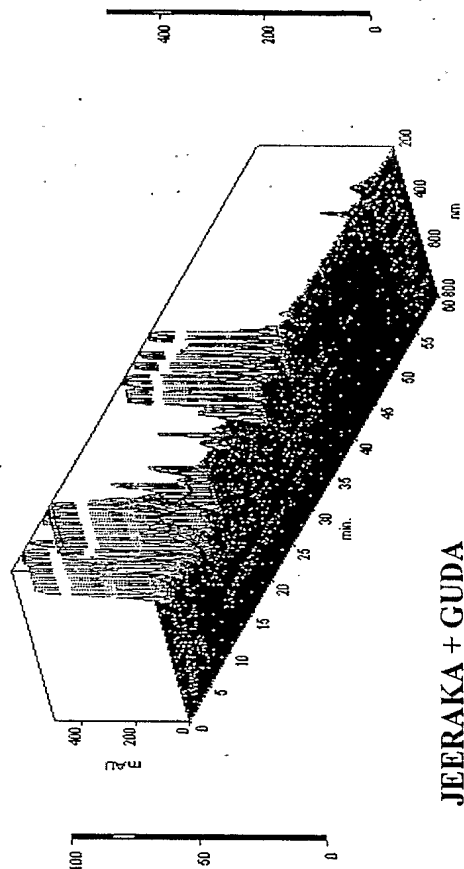
MEDICINES USED IN DIFFERENT INDIAN TRADITIONAL AND CULTURAL ACTIVITIES

G.11 HARIDRA + LIME



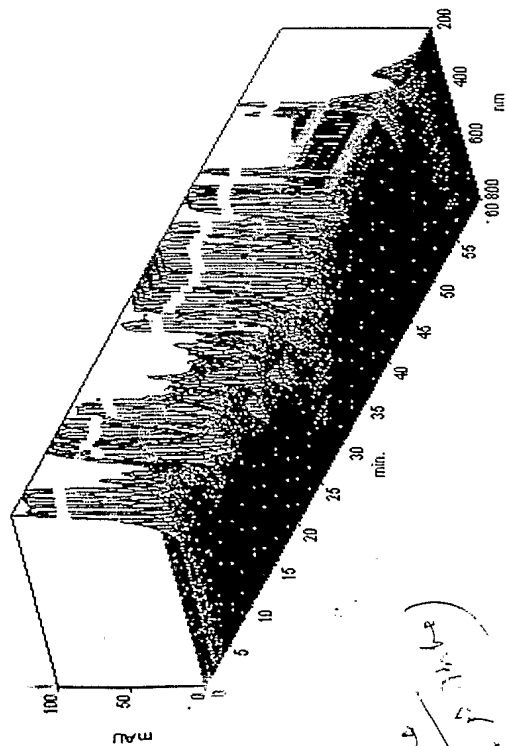
HARIDRA + LIME

G.11 JEERAKA + GUDA :



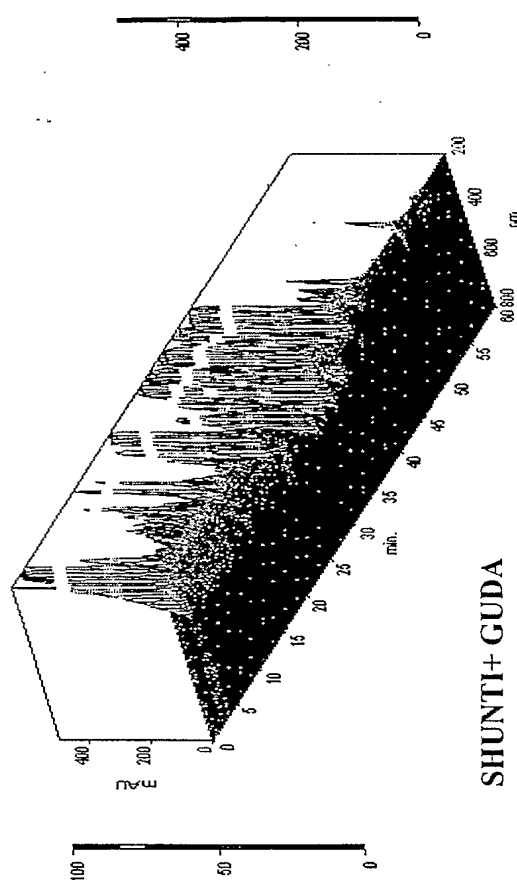
JEERAKA + GUDA

G.12 HARIDRA + LIME + GUDA



HARIDRA + LIME + GUDA

G.11 SHUNTI + GUDA :

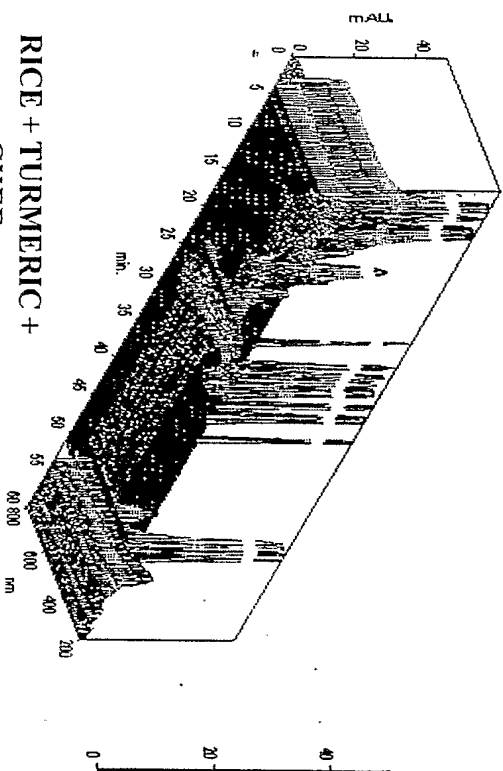
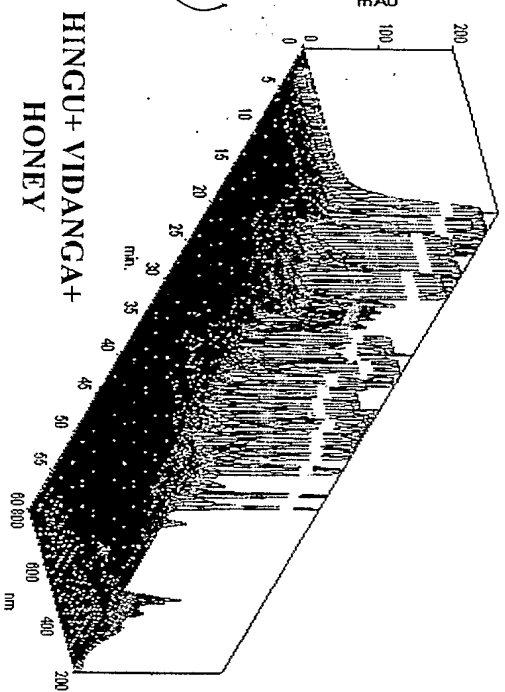
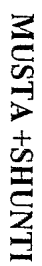
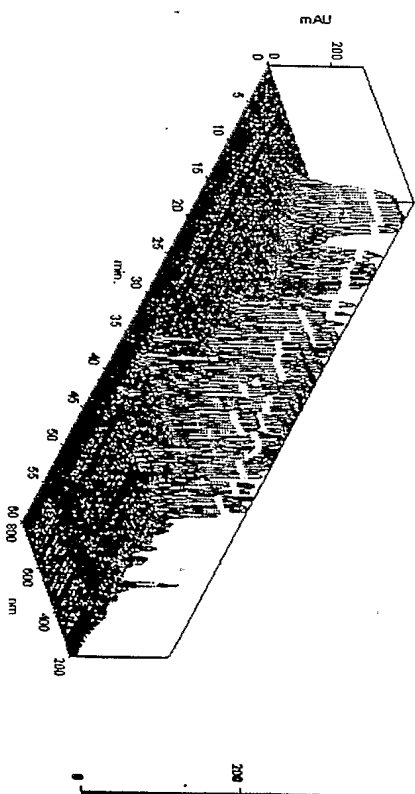
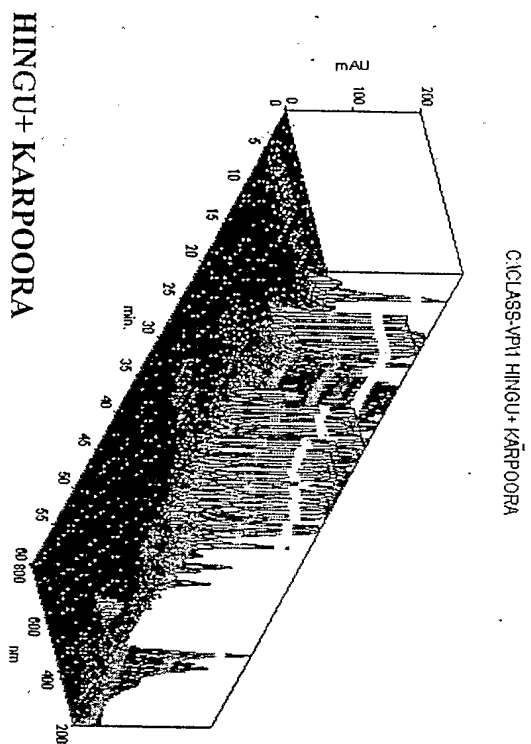


SHUNTI + GUDA

Signature
PR 15/11/2012

MEDICINES USED IN DIFFERENT INDIAN TRADITIONAL AND CULTURAL ACTIVITIES

FIG. 46



**HINGU+ VIDANGA+
HONEY**

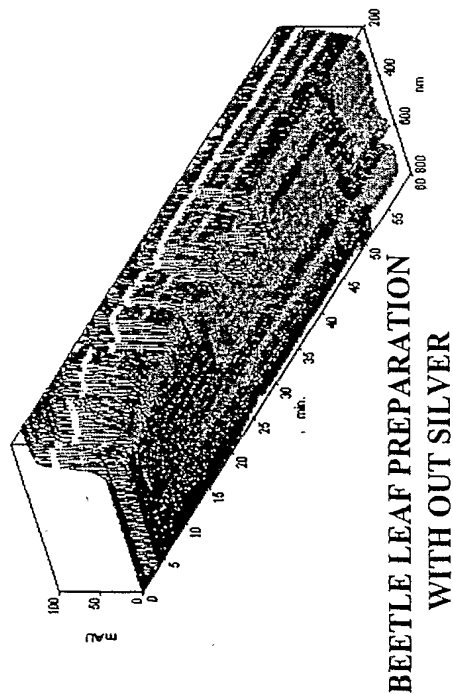
**RICE + TURMERIC +
GHEE**

Handwritten signature: *Handwritten signature*
(RVP signed)

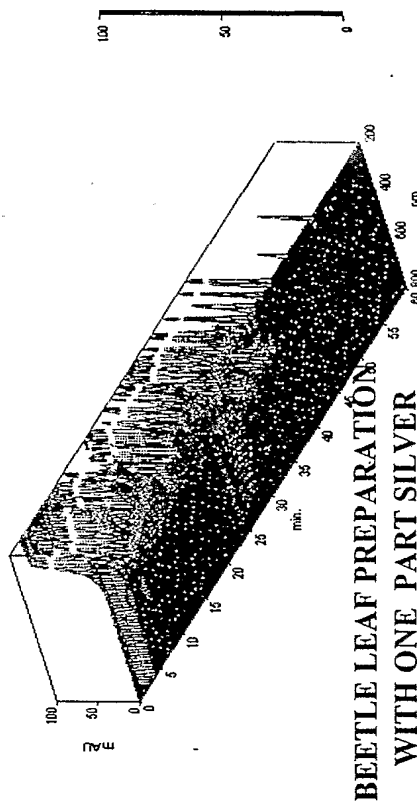
FIG 47

MEDICINES USED IN DIFFERENT INDIAN TRADITIONAL AND CULTURAL ACTIVITIES

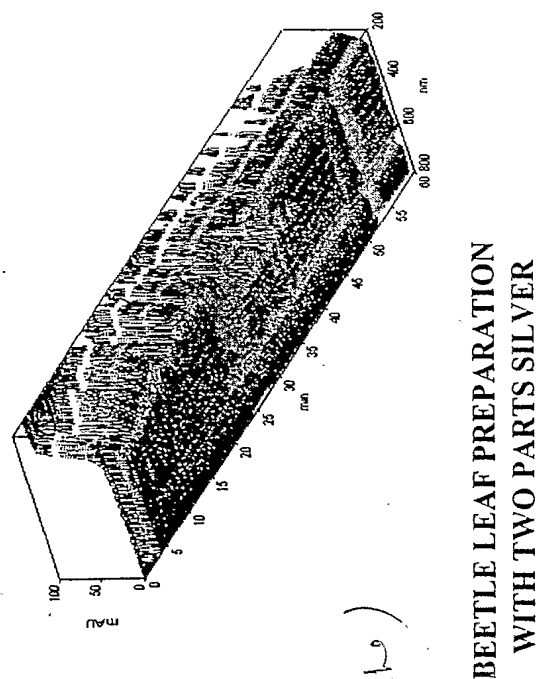
H11.CALCUTTA PAN FORMULA 1



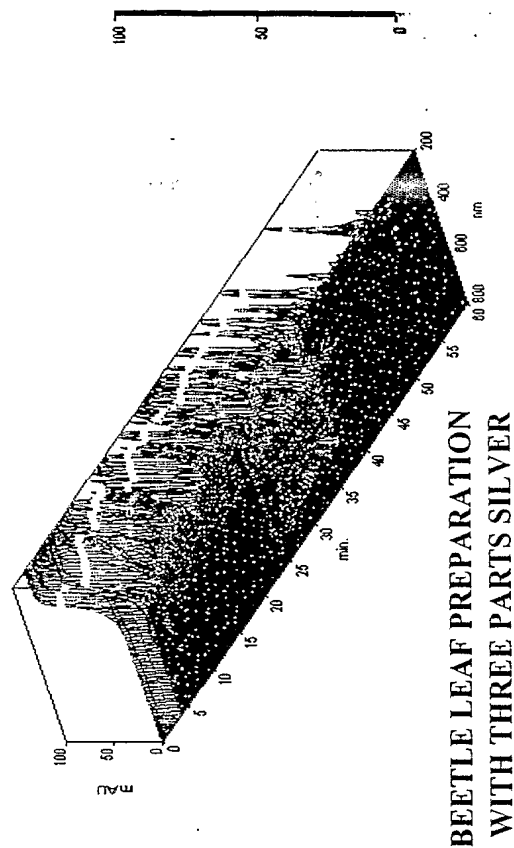
H11.CALCUTTA PAN FORMULA 2:



H11.CALCUTTA PAN FORMULA 3:



H11.CALCUTTA PAN FORMULA 4:



(RVPS:10)

PROCESS STANDARDIZATION OF OF BHALLATAKA

FIG 48

C:\CLASS-VP11.BHALLATAKA CRUDE

C:\CLASS-VP11.BHALLATKA (ISCHITIKA CHOORNA PROCESSED) STEP-II

BHALLATAKA CRUDE

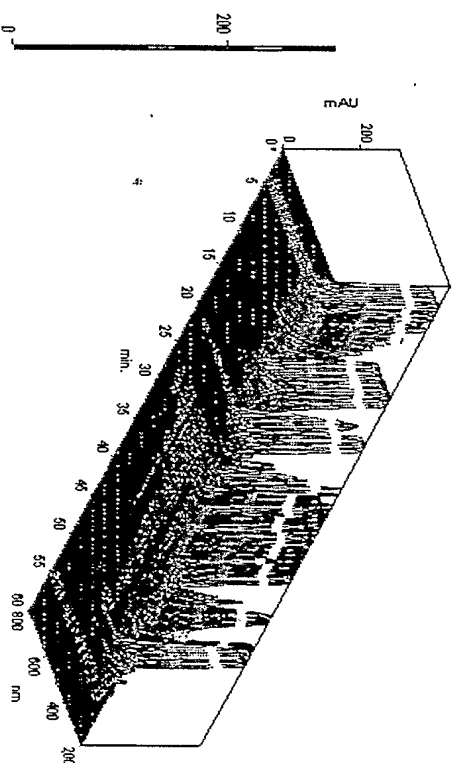
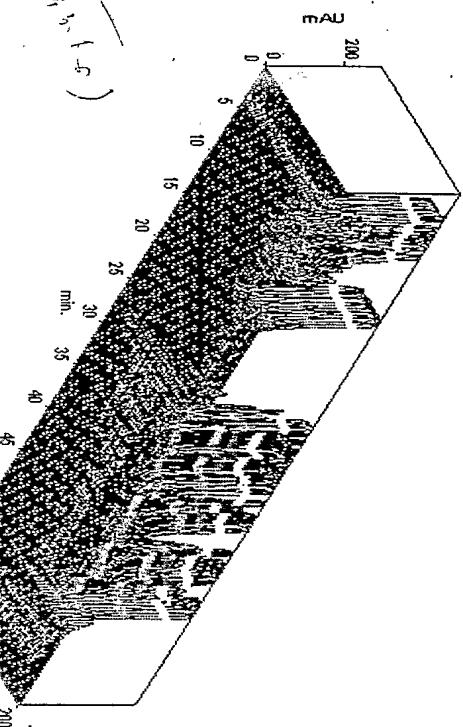
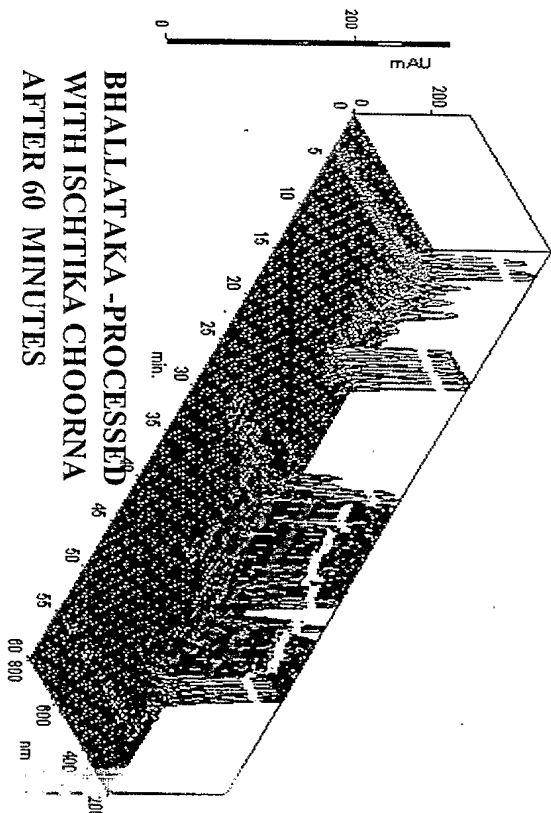
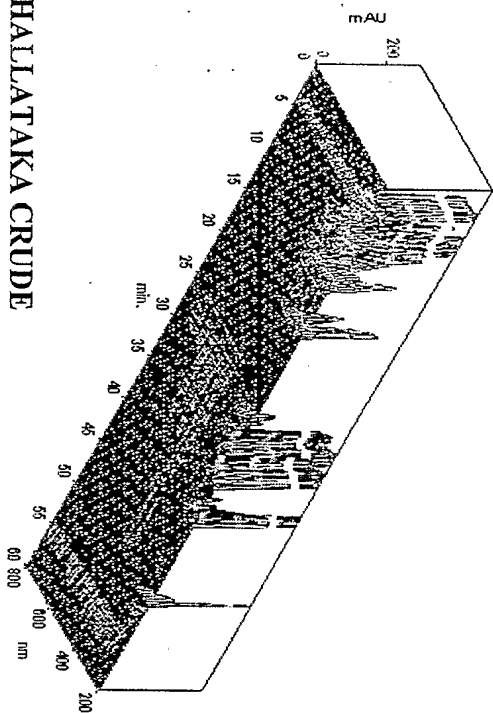
BHALLATAKA -PROCESSED
WITH ISCHITIKA CHOORNA
AFTER 60 MINUTES

C:\CLASS-VP11.BHALLATKA (ISCHITIKA CHOORNA PROCESSED) STEP-I

C:\CLASS-VP11 SAMPLE 2.WATER PROCESSED AFTER 2HRS

BHALLATAKA -PROCESSED
WITH ISCHITIKA CHOORNA
AFTER 30 MINUTES -

BHALLATAKA WATER EXTRACT AFTER 2HRS

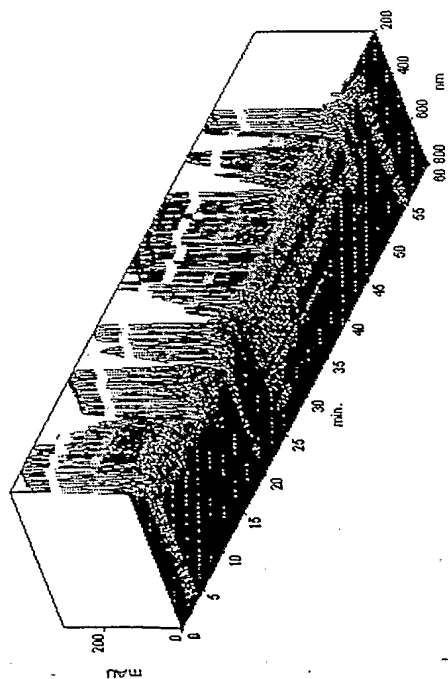


Signature
R. V. S. S. S.

STANDARDIZATION OF BHALLATAKA LEHYAM

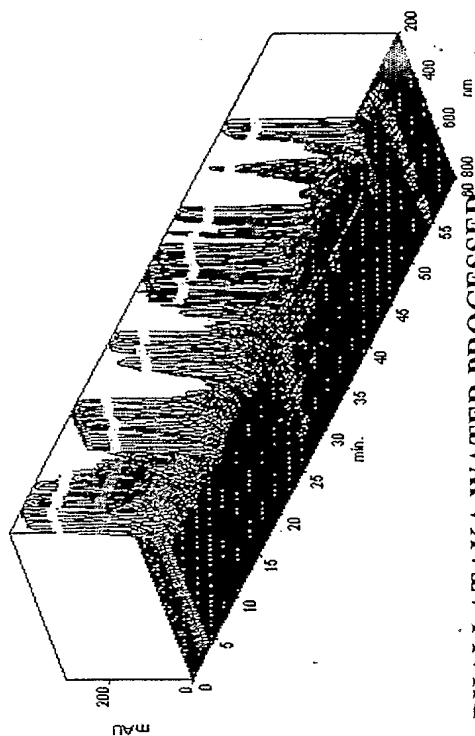
FIG-49

C:\CLASS-VP\1. SAMPLE 2 WATER PROCESSED AFTER 2HRS



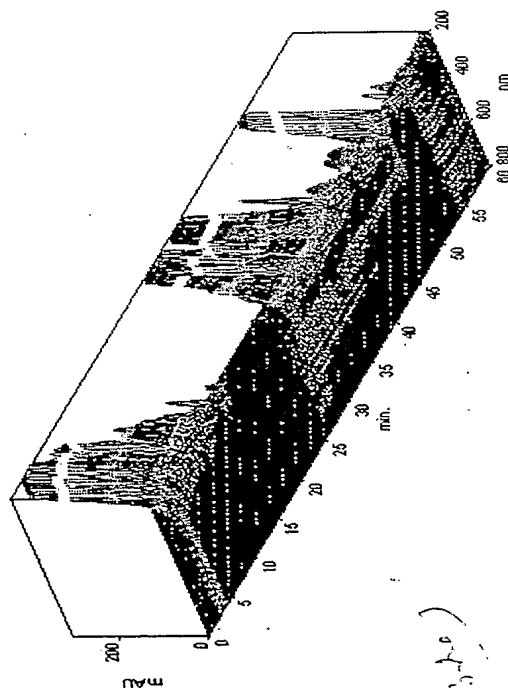
BHALLATAKA WATER PROCESSED
AFTER 2HRS

C:\CLASS-VP\1. SAMPLE 2 WATER PROCESSED REDUCED TO QUARTER



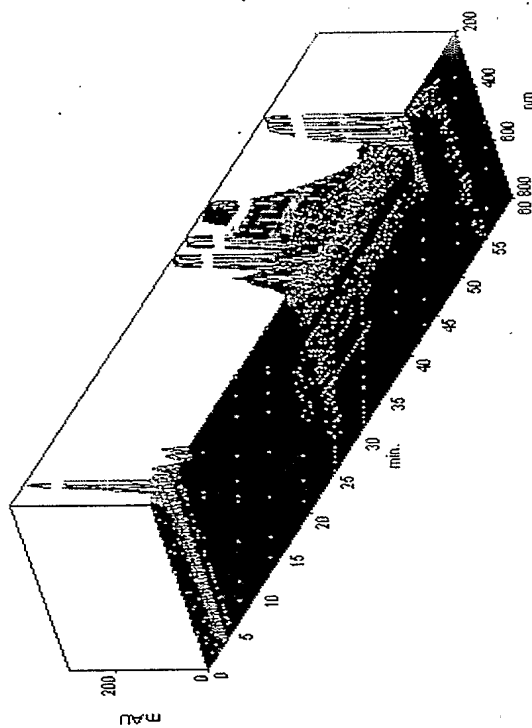
BHALLATAKA WATER PROCESSED
REDUCED TO QUARTER

C:\CLASS-VP\1. SAMPLE 5 MILK PROCESSED REDUCED TO QUARTER



BHALLATAKA MILK PROCESSED REDUCED TO QUARTER.

C:\CLASS-VP\1. BHALLATHAKA LEHYAM (GHEE SEPERATED)



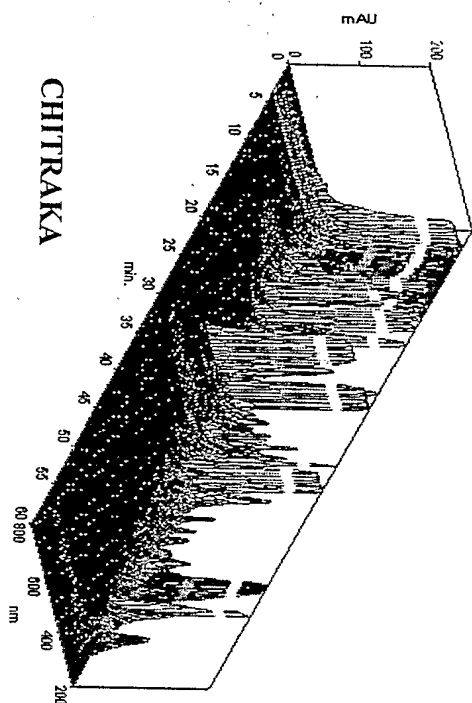
BHALLATAKA LEHYAM GHEE SEPERATED

(Signature)
(21P5110)

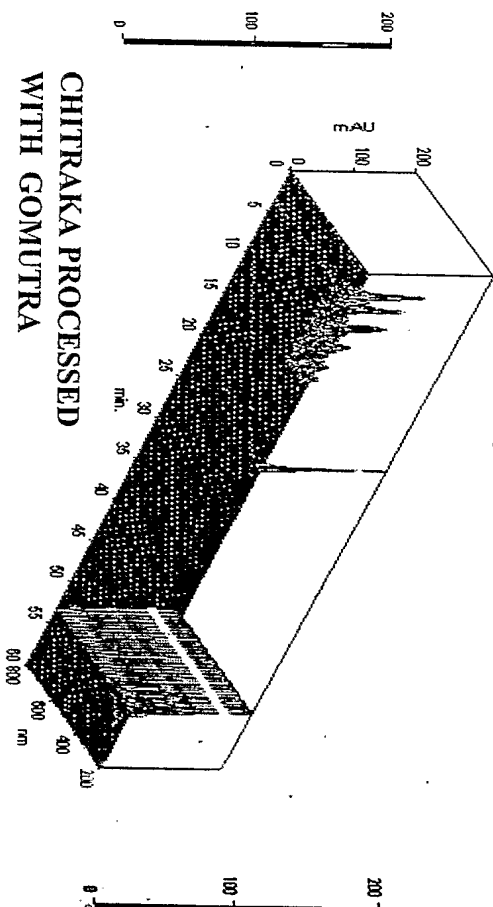
FINGER PRINTS OF CRUDE AND PROCESSED MEDICINES

FIG 50

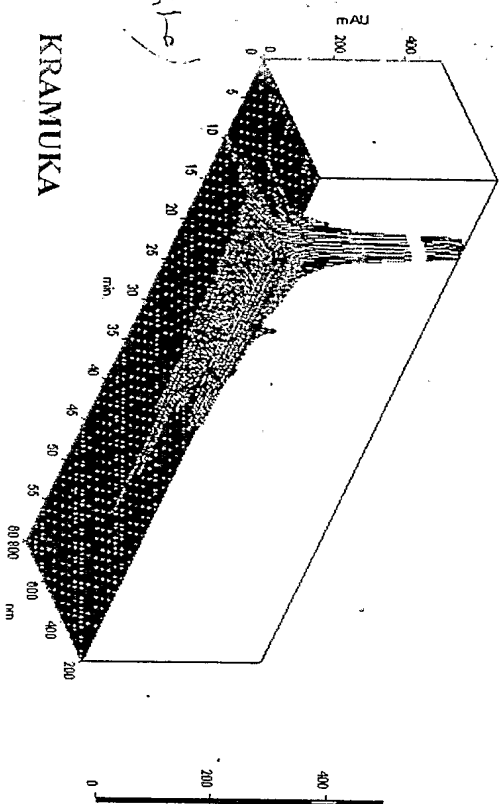
C.I CLASS-VPDatal CHITRAKA



H11 GOMUTRA SHODHITA CHITRAMOOLAM I



D.IIND 1K112 Pure Kramuka



G.II. KRAMUKHA (DRY,

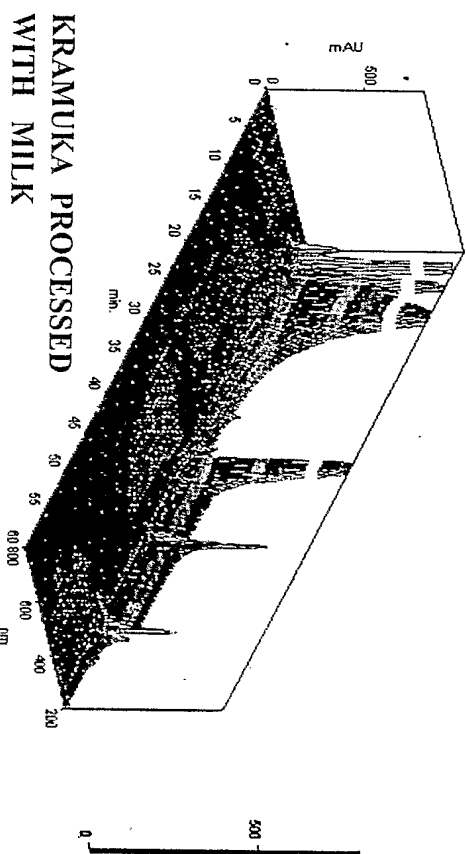
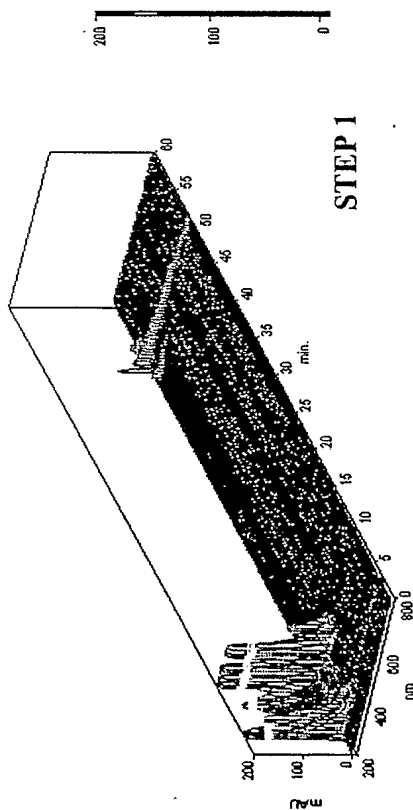


FIG 51

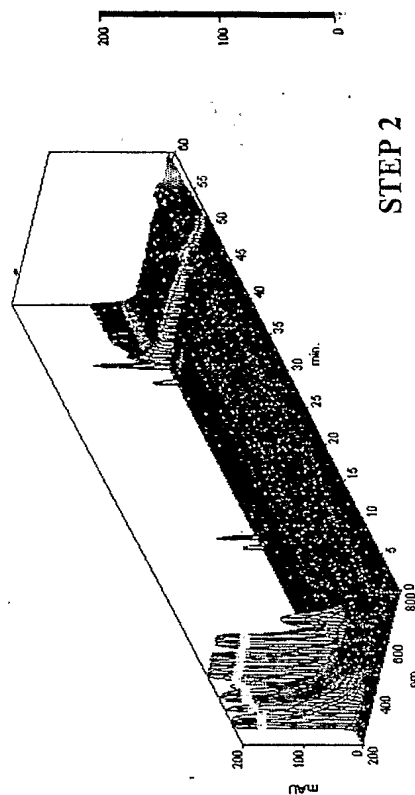
DARU HARIDRA RASAKRIYA PROCESS STANDARDIZATION (1)

H12.DARU HARIDRA RASAKRIYA PROCESS STEP 1



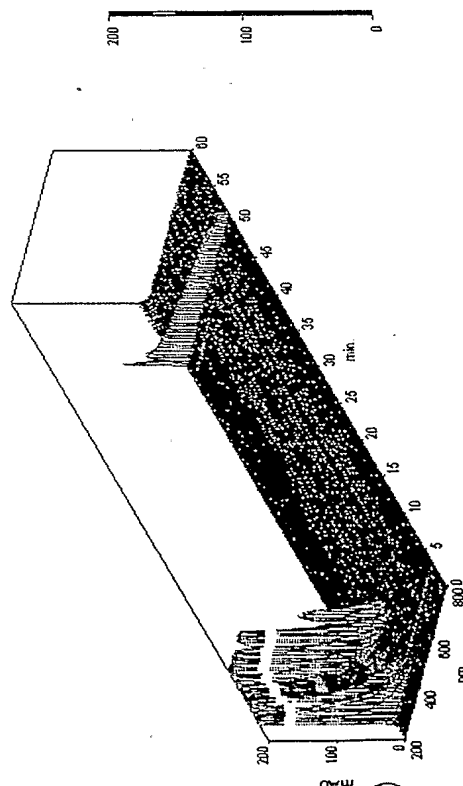
STEP 1

H11.DARU HARIDRA RASAKRIYA PROCESS STEP 2



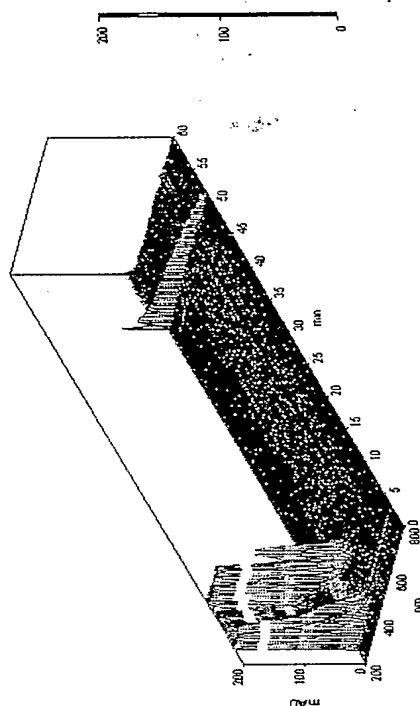
STEP 2

H11.DARU HARIDRA RASAKRIYA PROCESS STEP 3.1



STEP 3

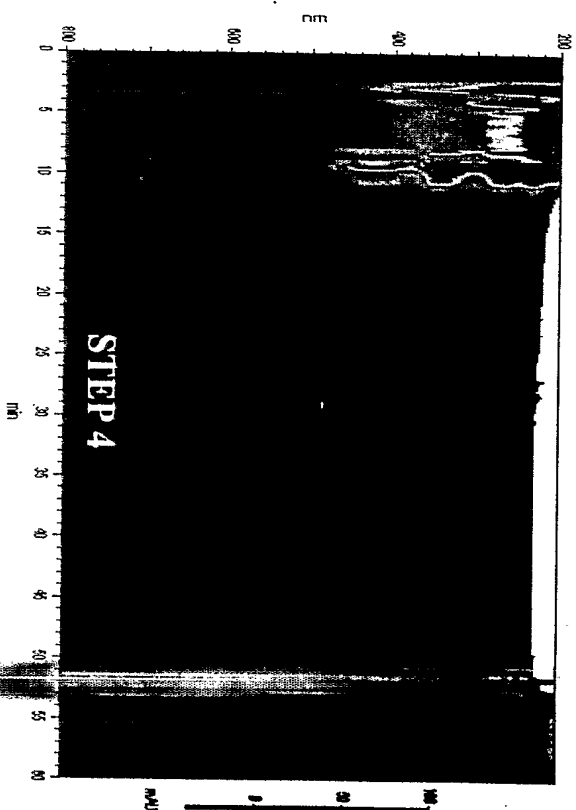
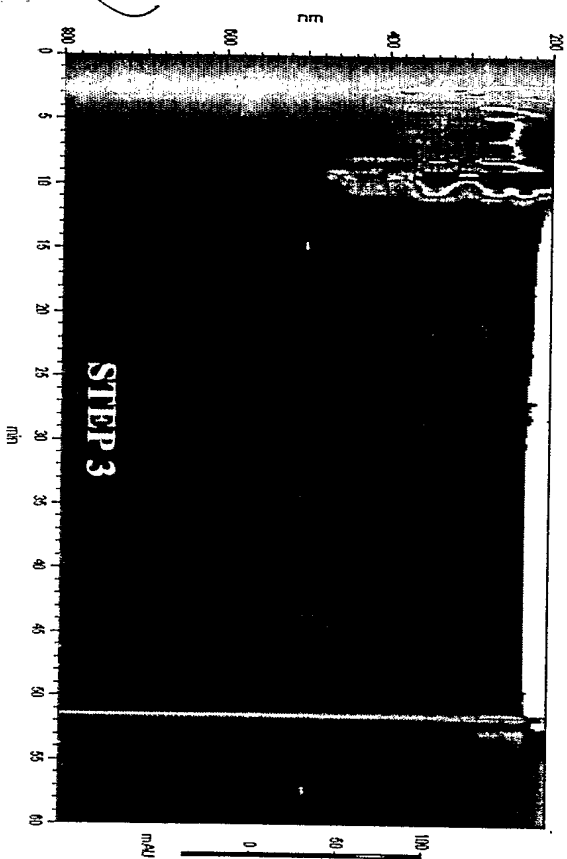
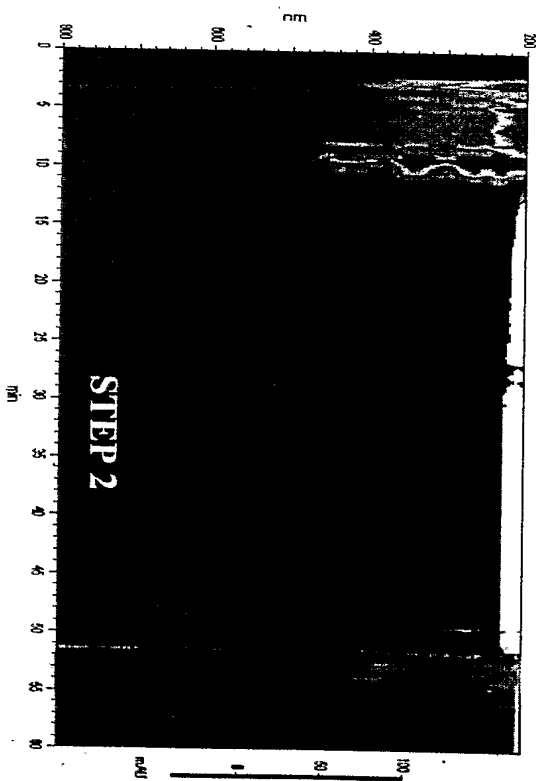
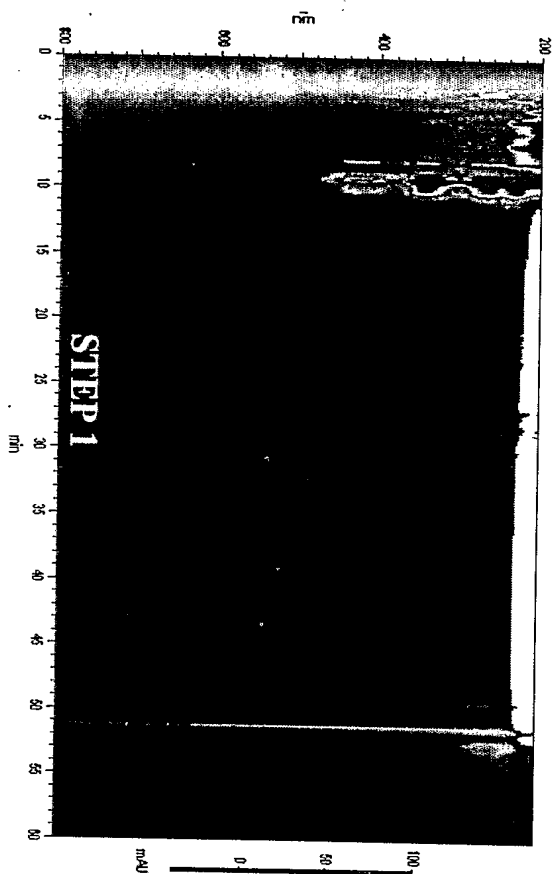
H1.BLOOD SAMPLES OF CRD11.DARU HARIDRA RASAKRIYA PROCESS STEP 4



STEP 4

(Signature)
(20/5/2016)

FIG 52

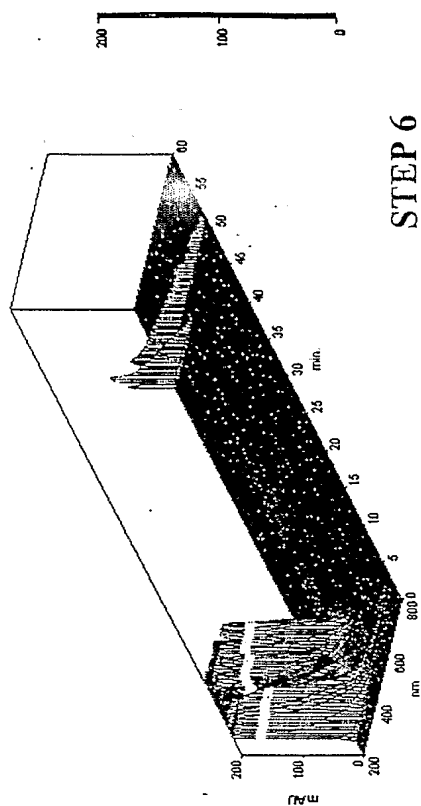


Handwritten signature: (RNP Siriba)

FIG 53

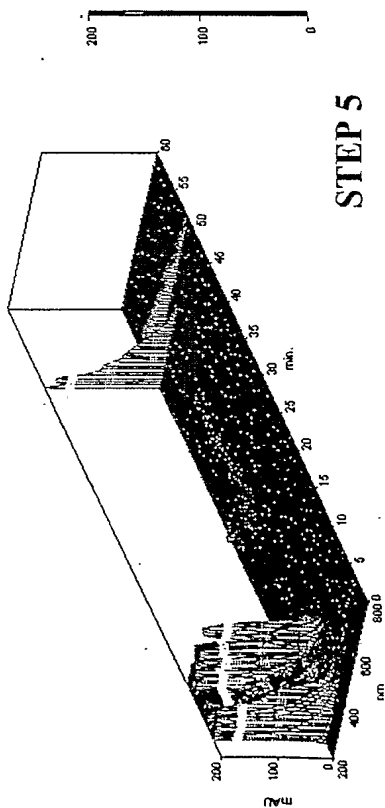
DARU HARIDRA RASAKRIYA PROCESS STANDARDIZATION (3)

HIBLOOD SAMPLES OF CRD11.DARUHARIDRA RASAKRIYA PROCESS STEP 6



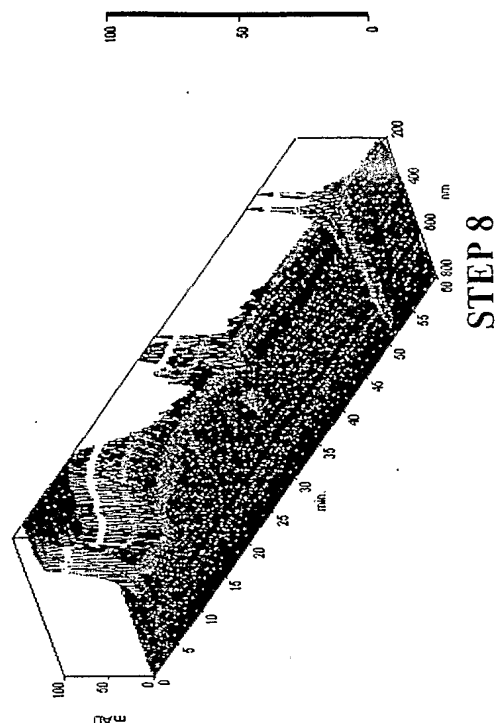
STEP 6

HIBLOOD SAMPLES OF CRD11.DARUHARIDRA RASAKRIYA PROCESS STEP 5 1



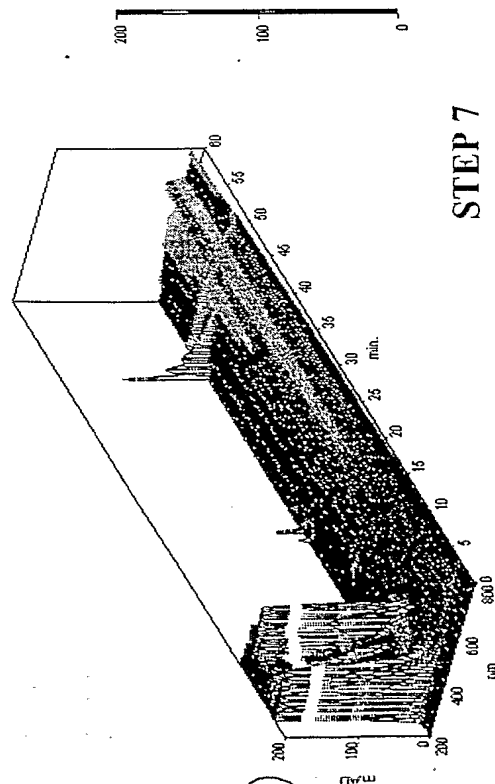
STEP 5

HIBLOOD SAMPLES OF CRD11.DARUHARIDRA RASAKRIYA PROCESS STEP 8



STEP 8

HIBLOOD SAMPLES OF CRD11.DARUHARIDRA RASAKRIYA PROCESS STEP 7

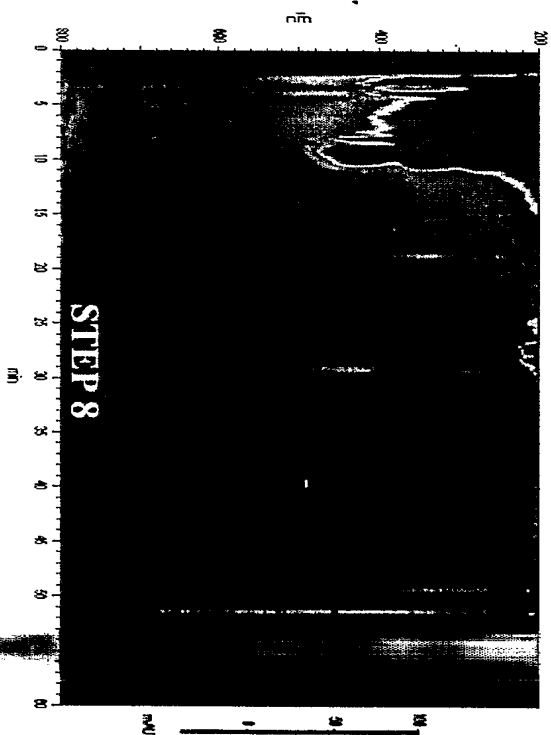
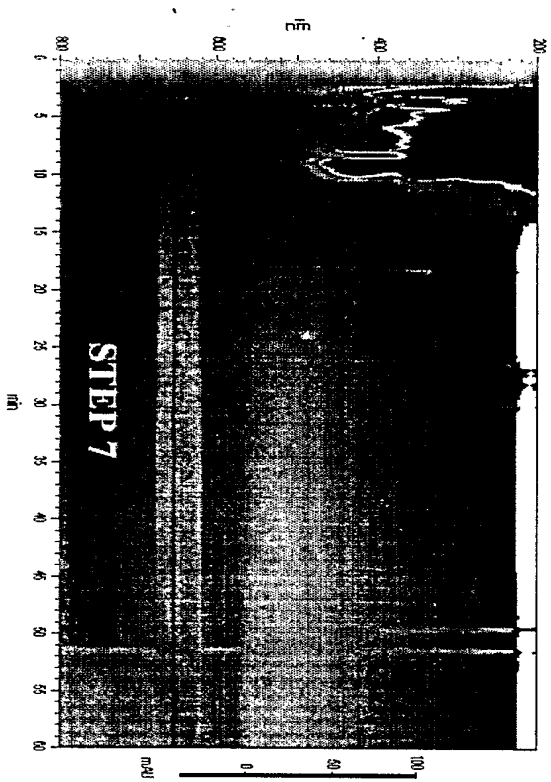
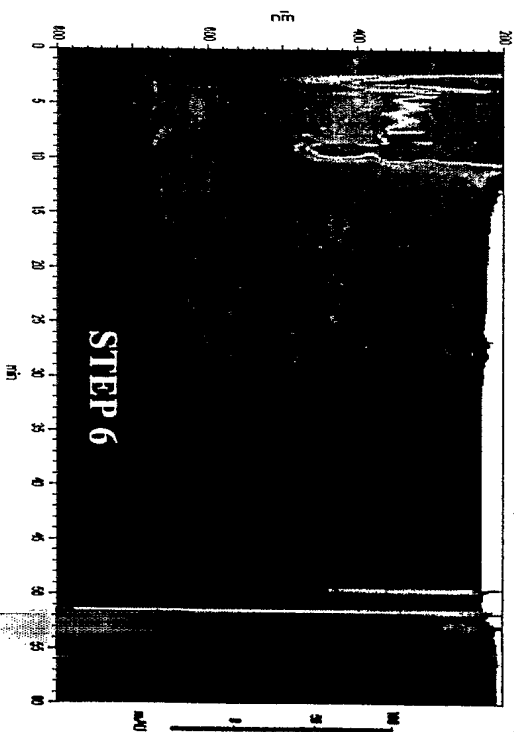
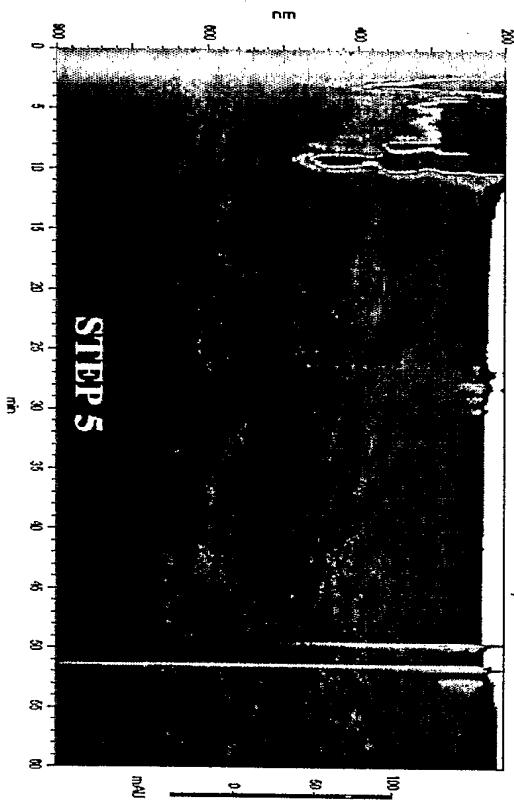


STEP 7

Handwritten signature and text:
 (Signature)
 RASAKRIYA

DARU HARIDRA RASAKRIYA PROCESS STANDARDIZATION

FIG 54

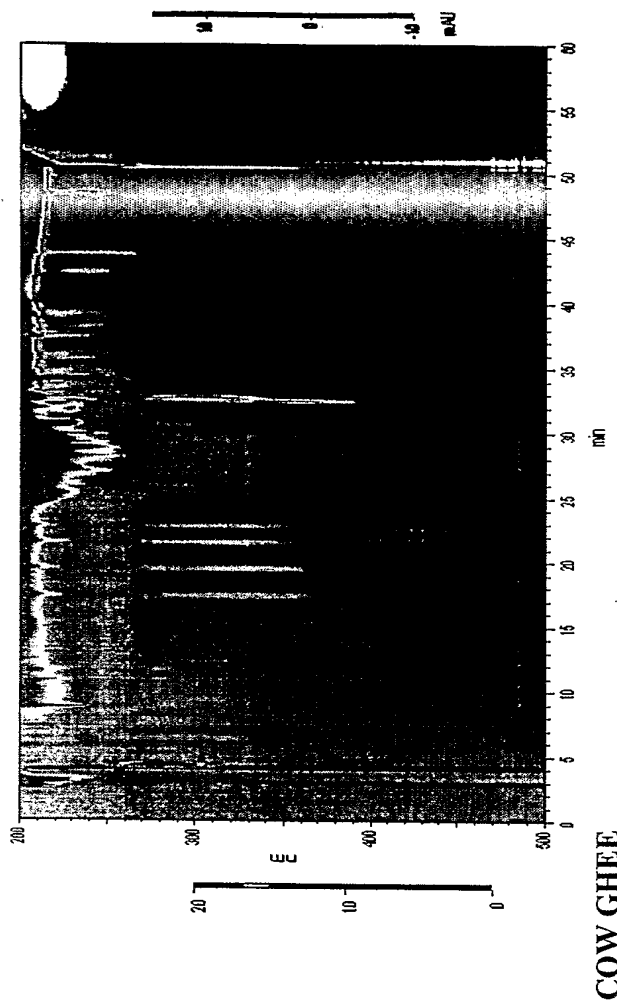
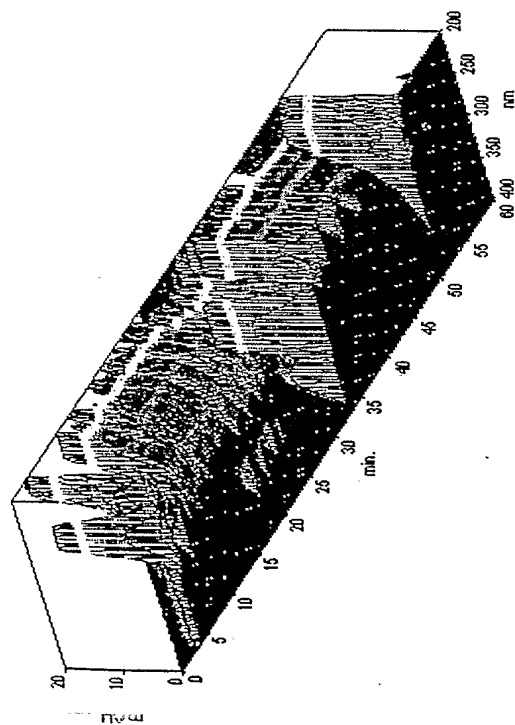


Dr. B. S. Singh
Dr. B. S. Singh

DIFFERENT GHEE SAMPLES

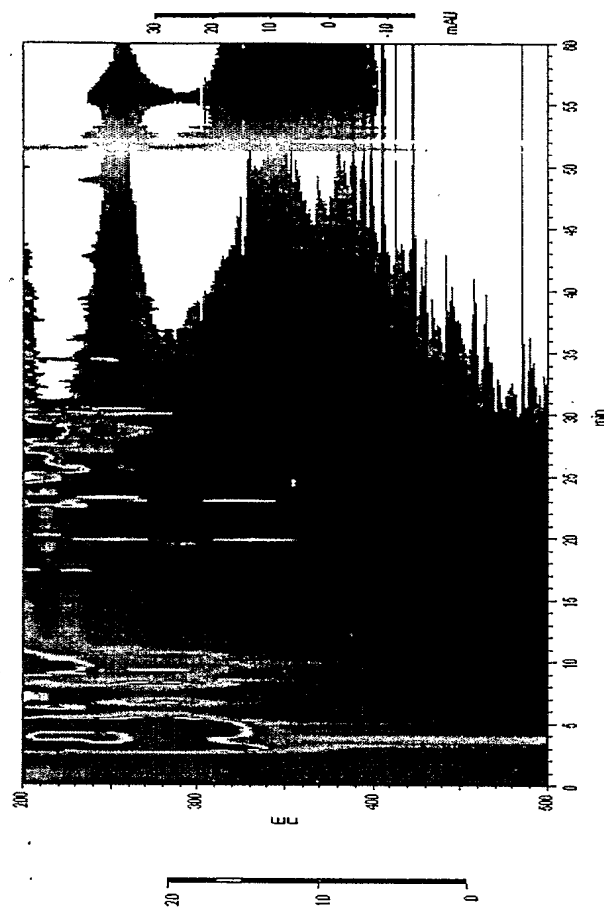
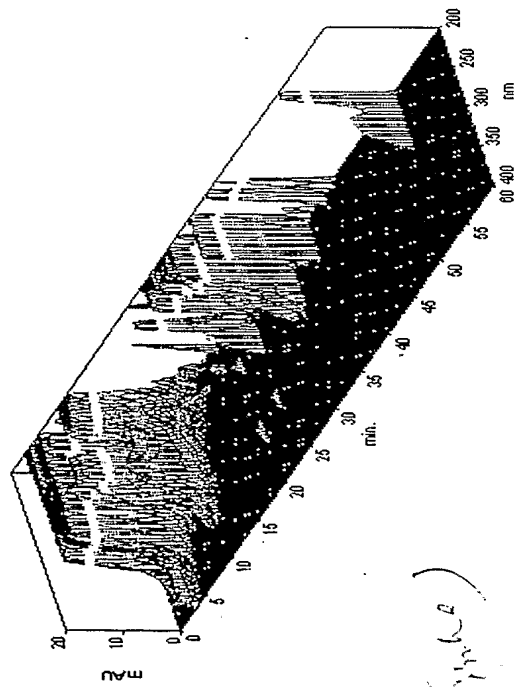
FIG 55

G:\CHROMATOGRAPHIC DATABASE\FOODS\2 GO GHRI.TAM



COW GHEE

C:\CLASS-VP\Data1\BUFFELO GHEE (



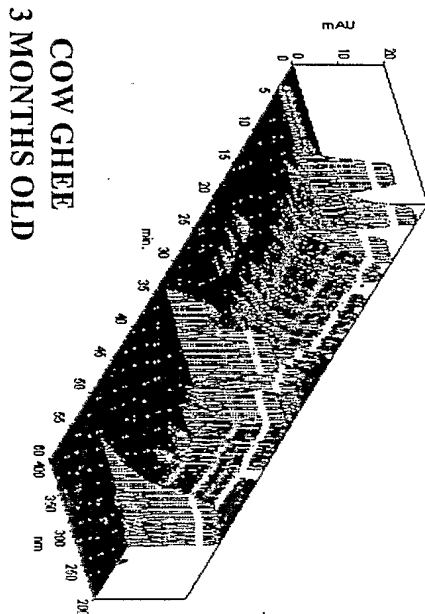
BUFFELLO GHEE

Report (RVP 5/11/02)

FINGERPRINTS OF GHEE SAMPLES

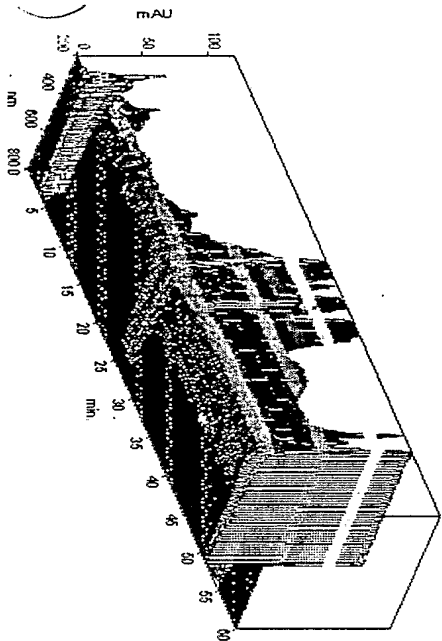
FIG 56

GLCHROMATOGRAPHIC DATABASE 00DS12.60 GHRITHAM

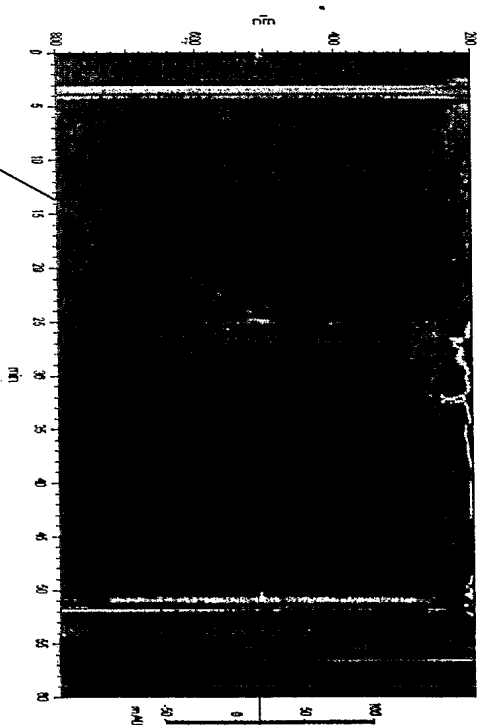
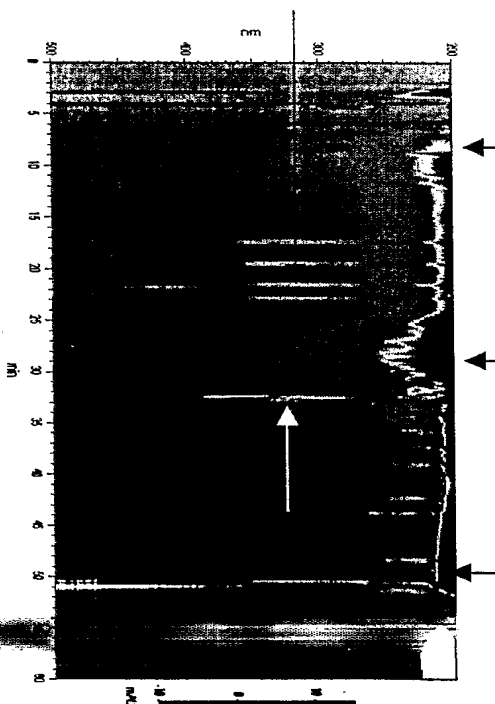


COW GHEE
3 MONTHS OLD

C1 CLASS-VPI1.60 GHRITHAM (6 YEARS OLD)



COW GHEE
6 YEARS OLD

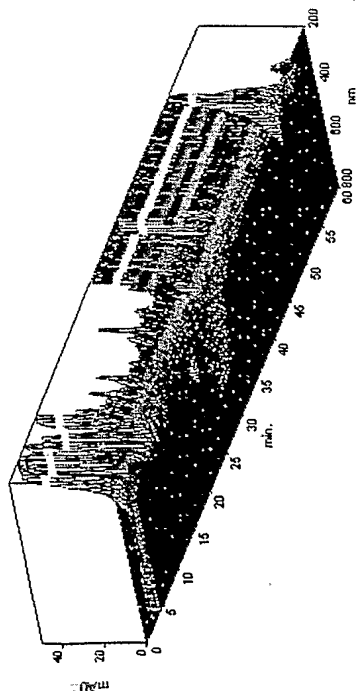


*Oil Spill -
KVC Sharma*

FIG 57

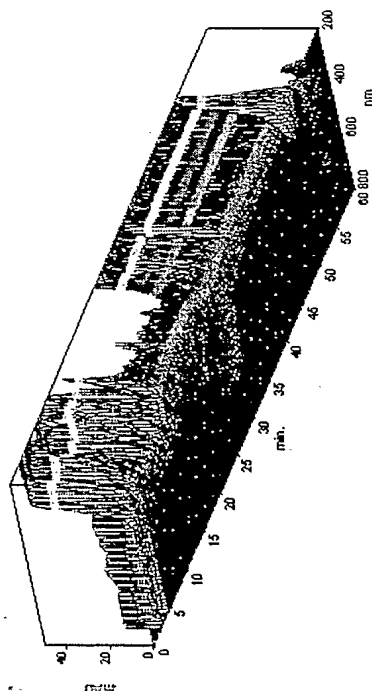
DIFFERENT COMBINATIONS OF GHEE AND HONEY

C:\CLASS-VPData\1. HONEY - GHEE (1-9)



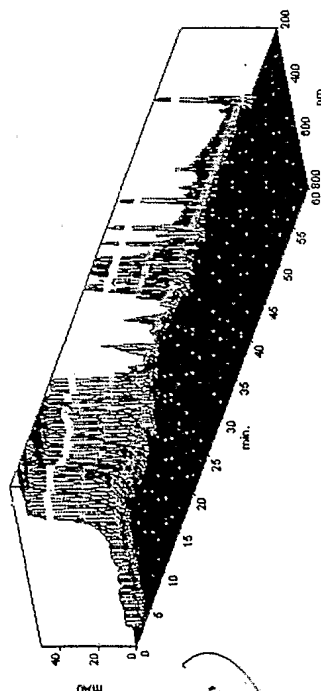
HONEY-GHEE 1-9

C:\CLASS-VPData\1. HONEY - GHEE (5-5)



HONEY-GHEE 5-5

C:\CLASS-VPData\1. HONEY - GHEE (9-1)

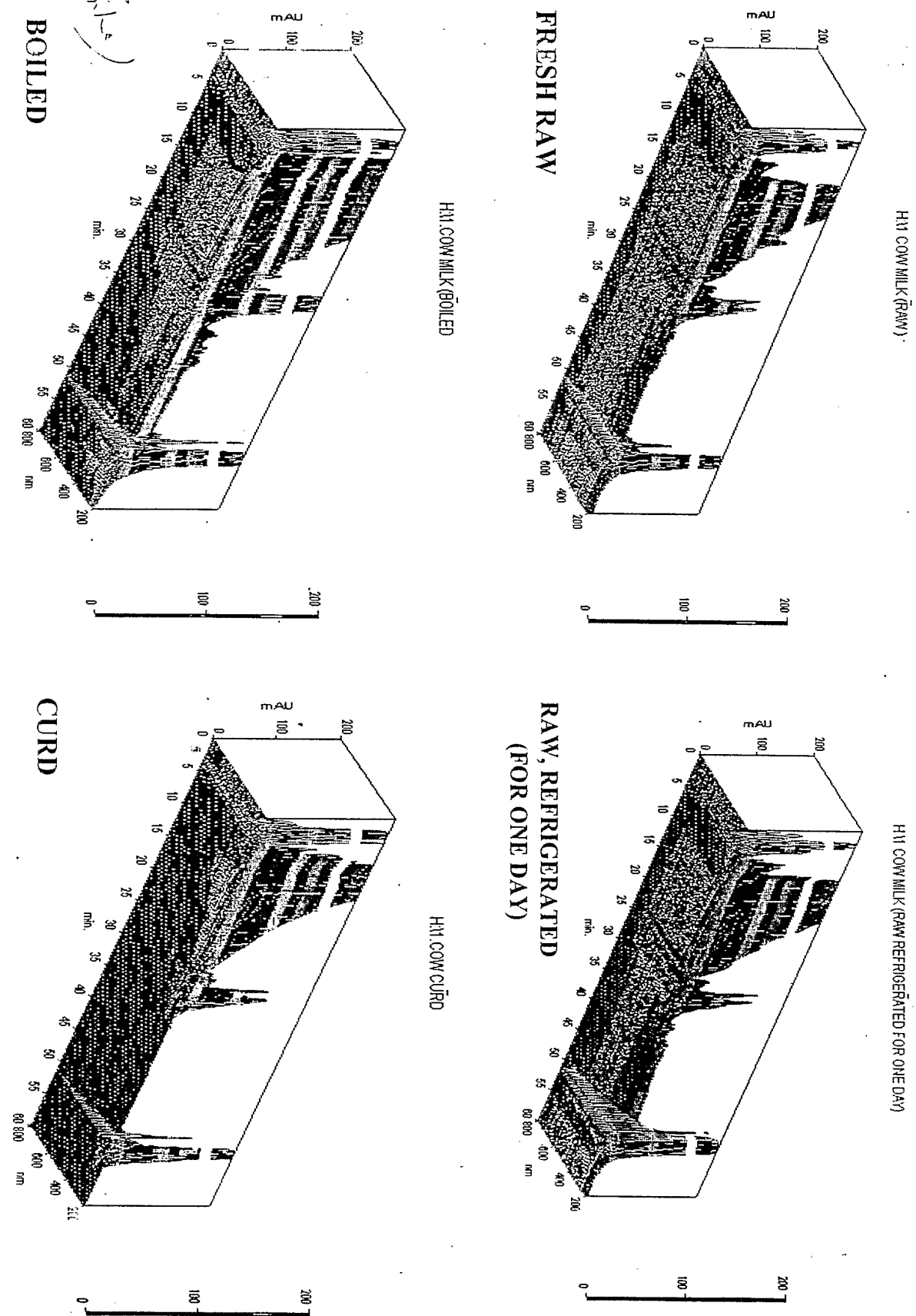


HONEY-GHEE 9-1

Handwritten signature and date:
 25/05/2012

COW MILK IN DIFFERENT CONDITIONS

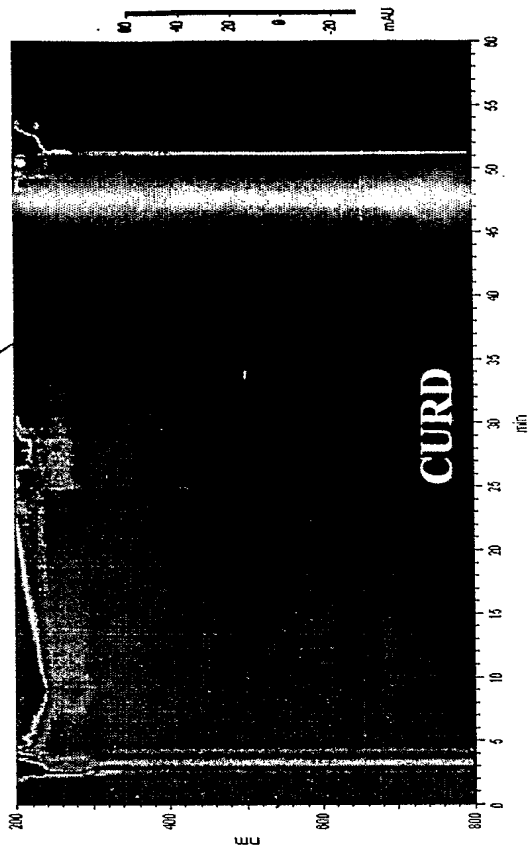
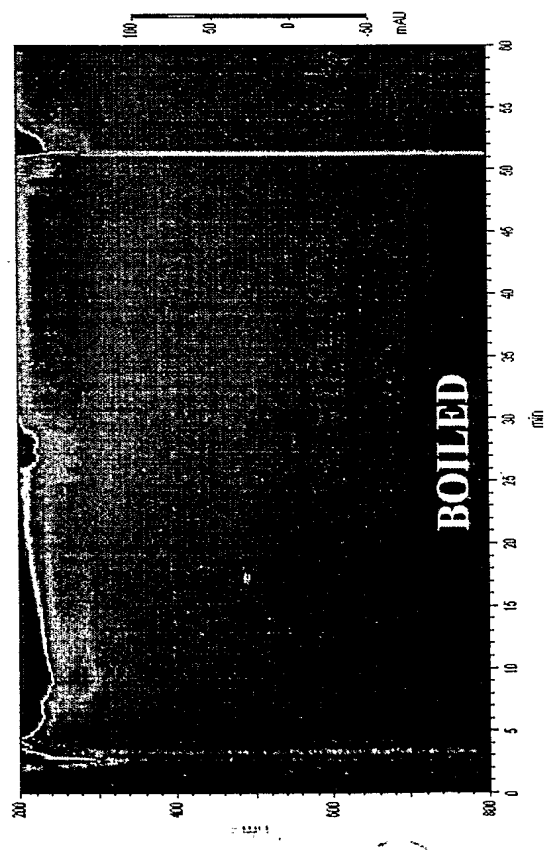
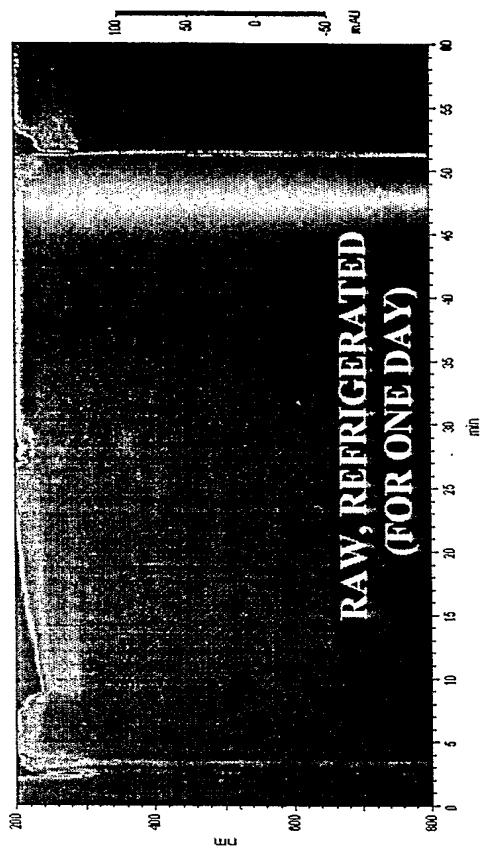
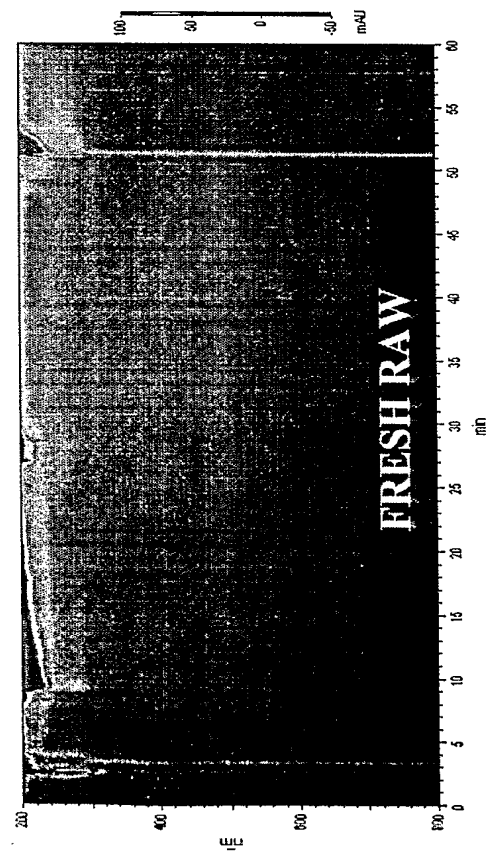
FIG 58



(RVP Sim)

COW MILK IN DIFFERENT CONDITIONS

FIG 59

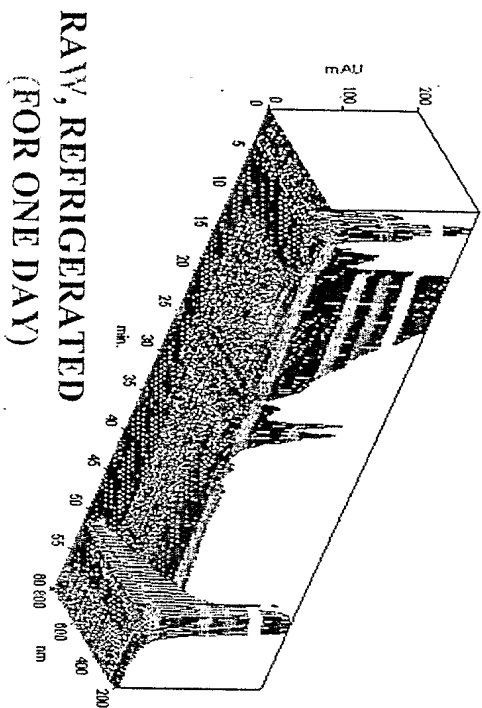


Q. 10
R. P. S. 10

RAW MILK IN DIFFERENT CONDITIONS

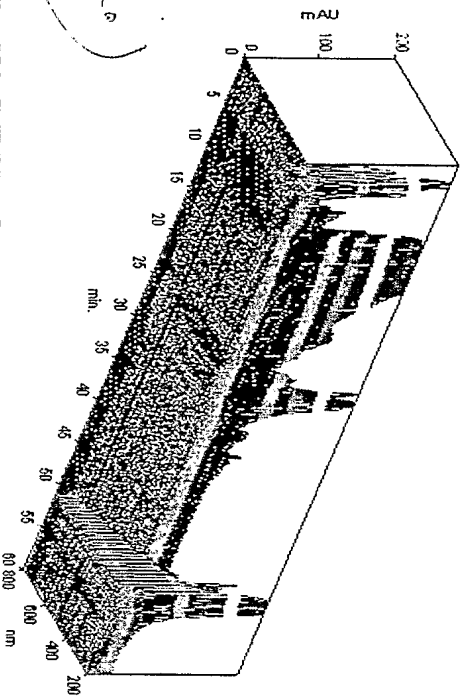
FIG 60

H11 COW MILK (RAW REFRIGERATED FOR ONE DAY)

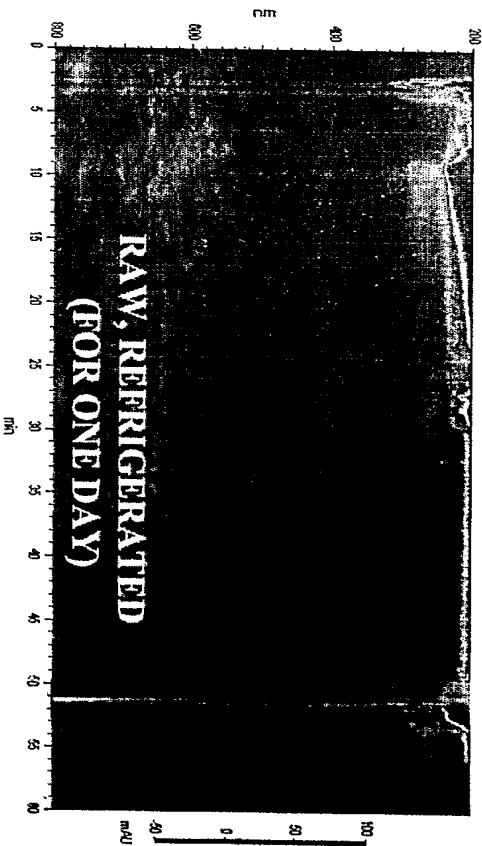


RAW, REFRIGERATED
(FOR ONE DAY)

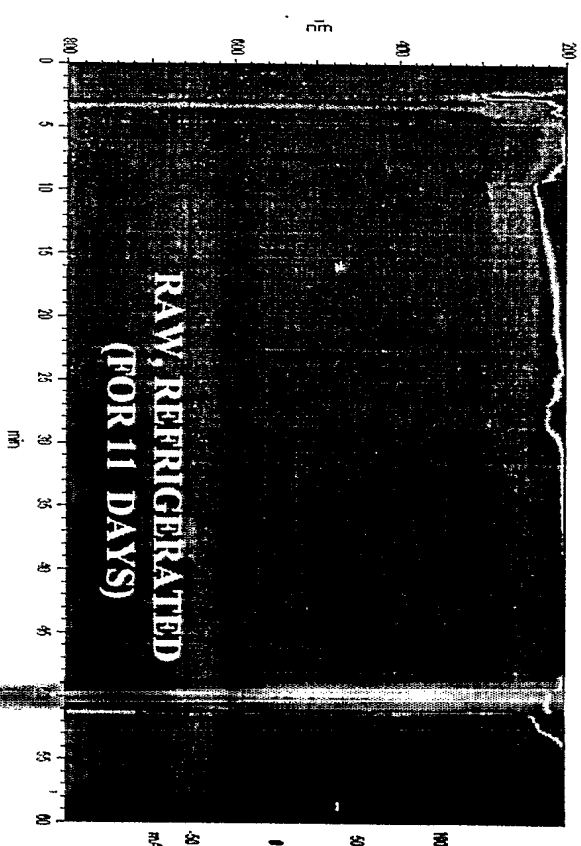
H11 RAW COW MILK REFRIGERATED FOR 11 DAYS



RAW, REFRIGERATED
(FOR 11 DAYS)



RAW, REFRIGERATED
(FOR ONE DAY)



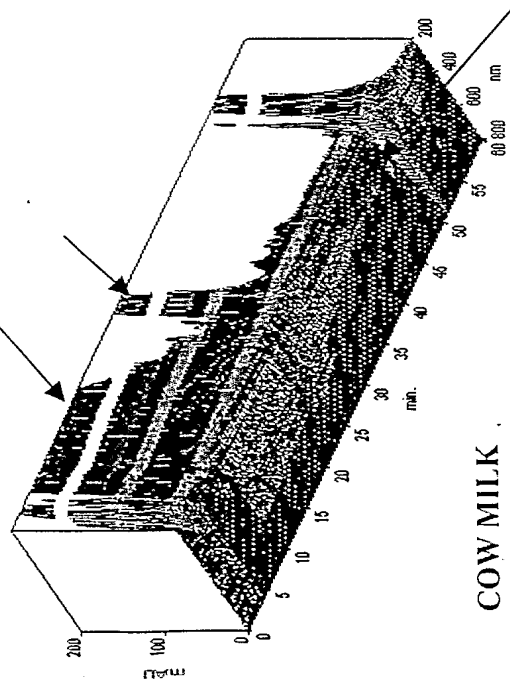
RAW, REFRIGERATED
(FOR 11 DAYS)

Handwritten:
Ogawa
RNP S, mAU

FIG 61

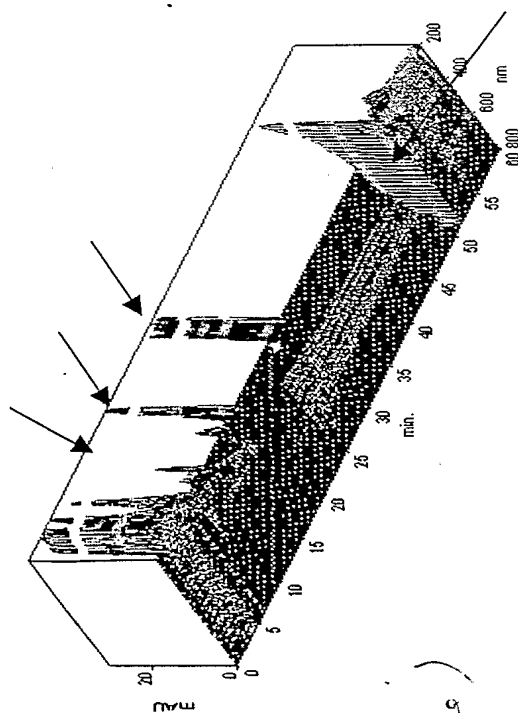
DIFFERENT SOURCES OF MILK

H.M. COW MILK (BOILED)

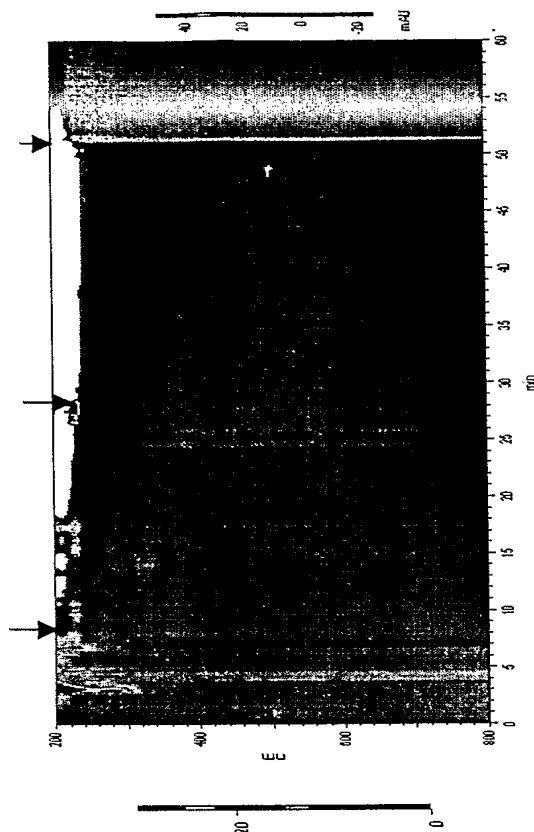
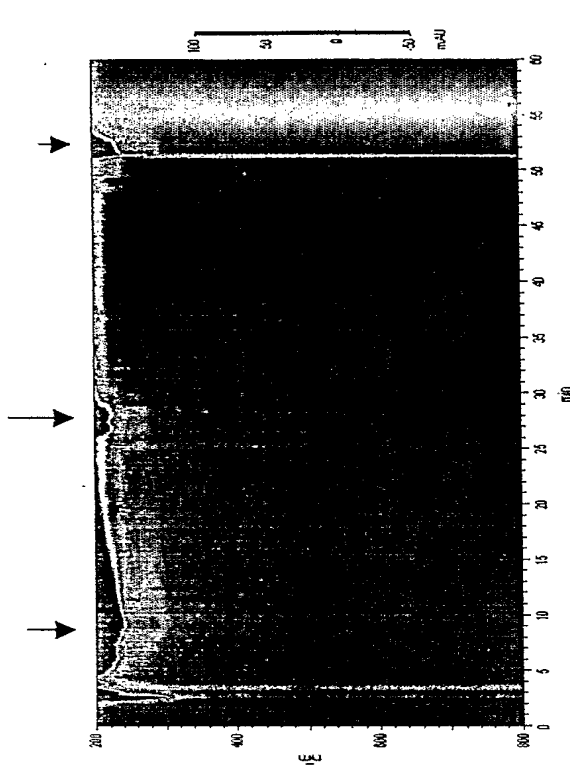


COW MILK

H.M. MILK WITH TURMERIC 01. BUFFELLOW MILK I



BUFFLO MILK

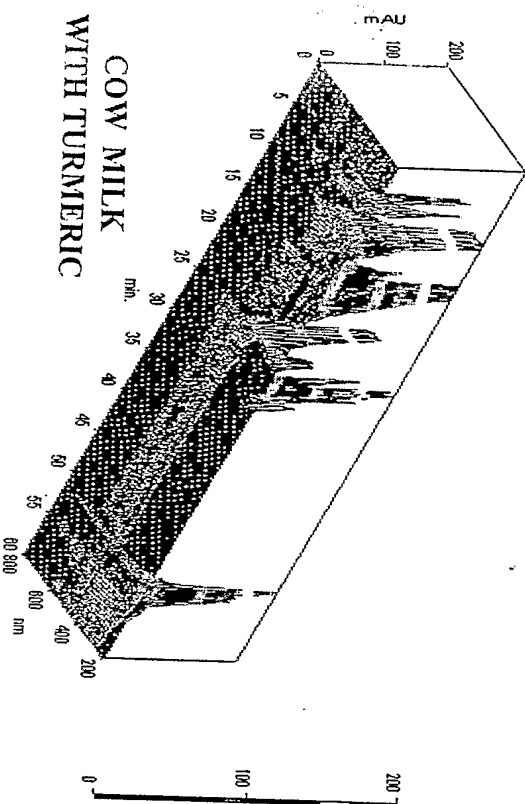


(RNP Sinks)

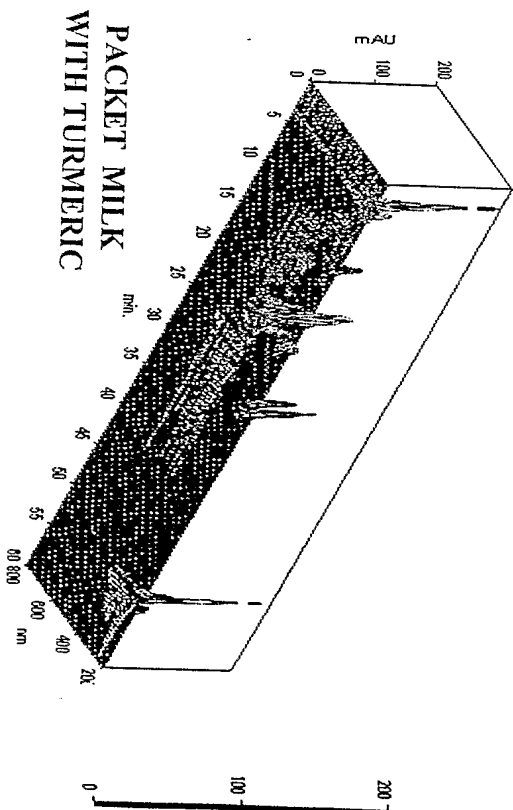
TURMERIC WITH MILK

FIG 62

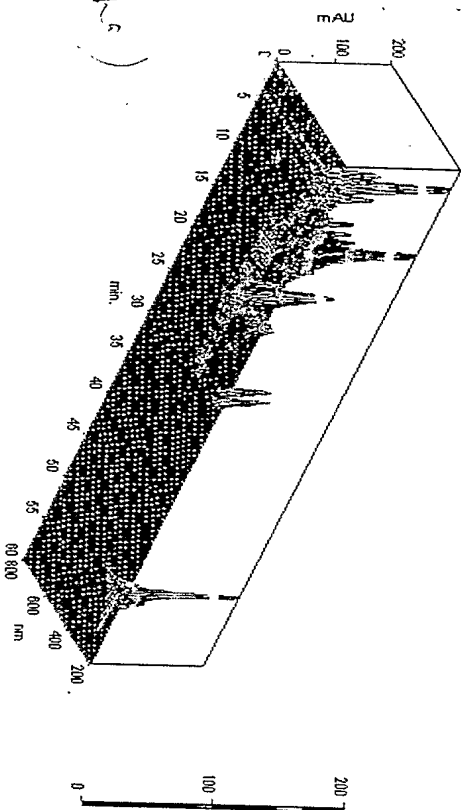
H.MILK WITH TURMERIC1, COW MILK WITH TURMERIC



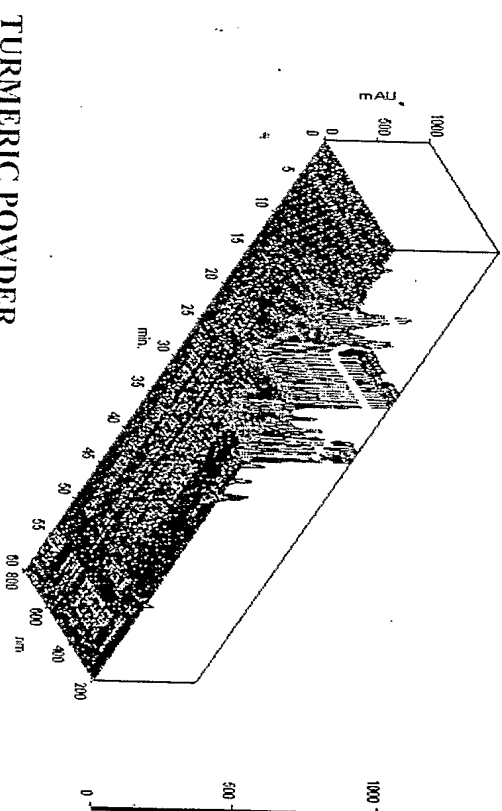
H.MILK WITH TURMERIC2, PACKET MILK WITH TURMERIC D



H.MILK WITH TURMERIC1, BUFFALO MILK WITH TURMERIC D I



C. CLASS-VPM IN TURMERIC D



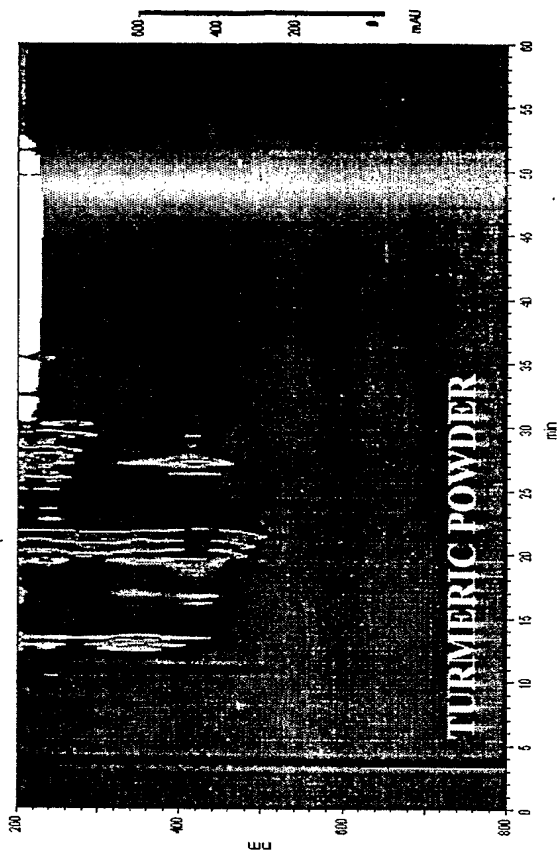
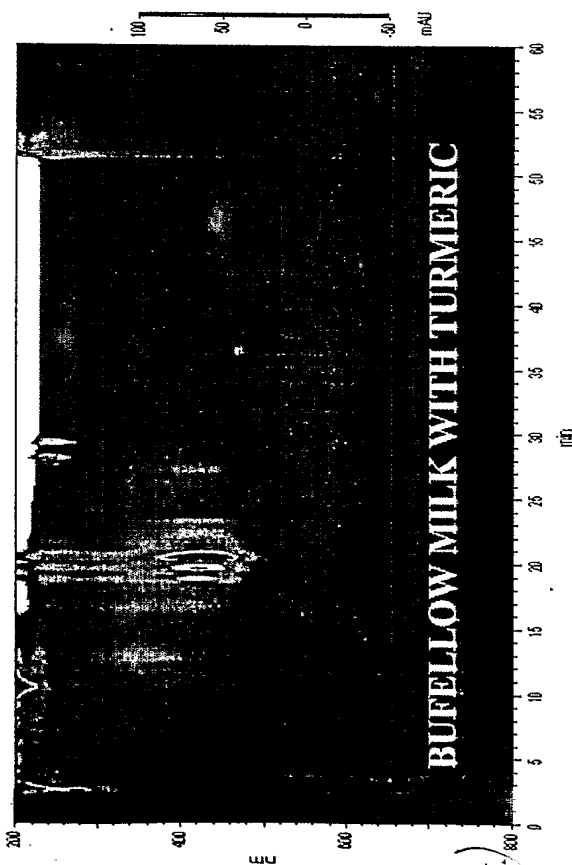
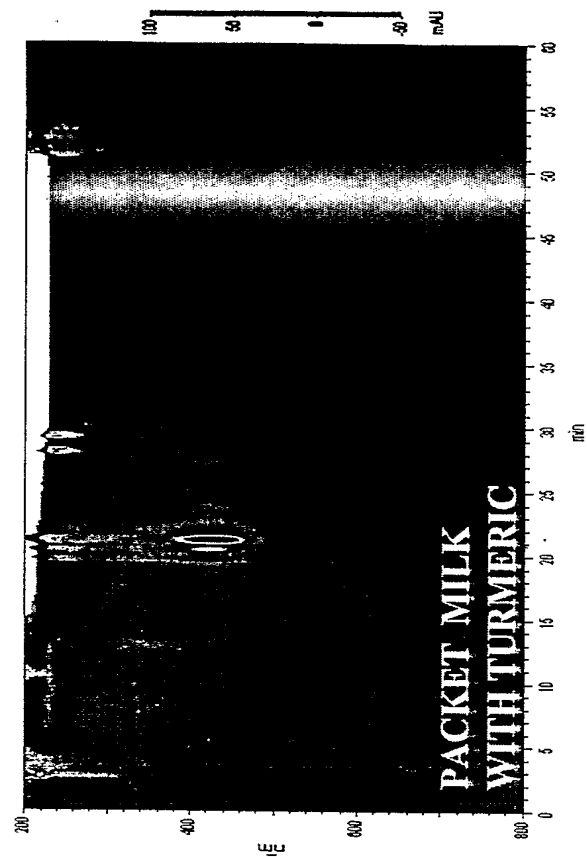
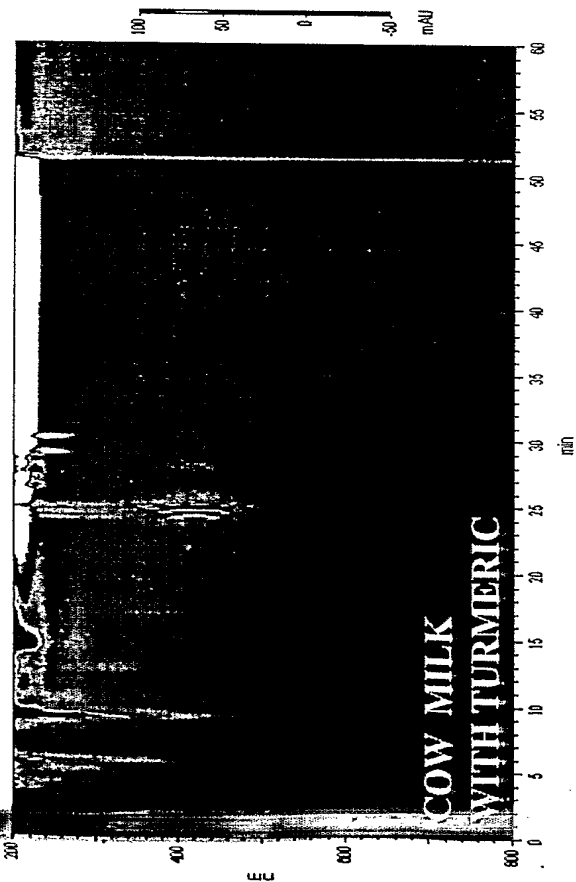
BUFELLO MILK WITH TURMERIC

TURMERIC POWDER

Originals
R.N. Srinivas

TURMERIC WITH MILK

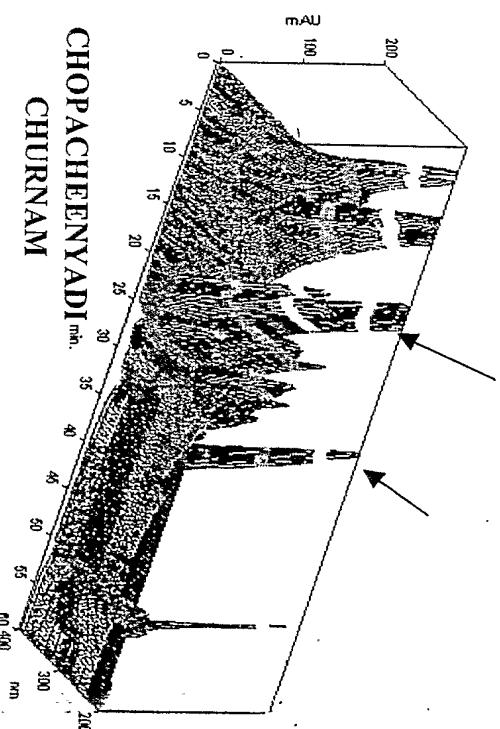
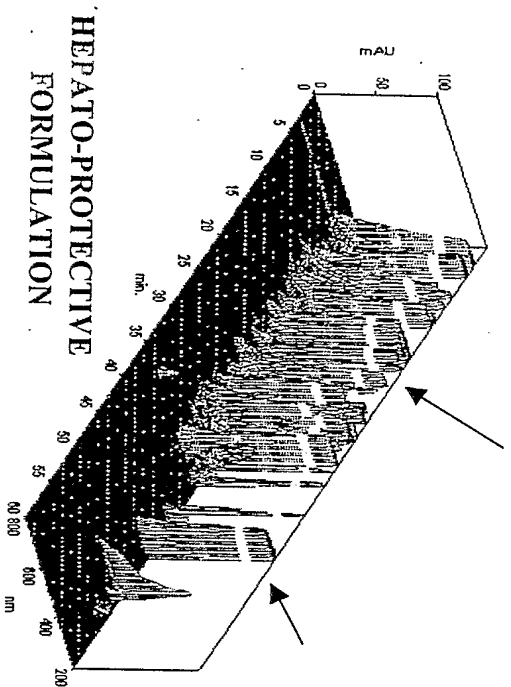
FIG 63



(Signature)
Supervisor

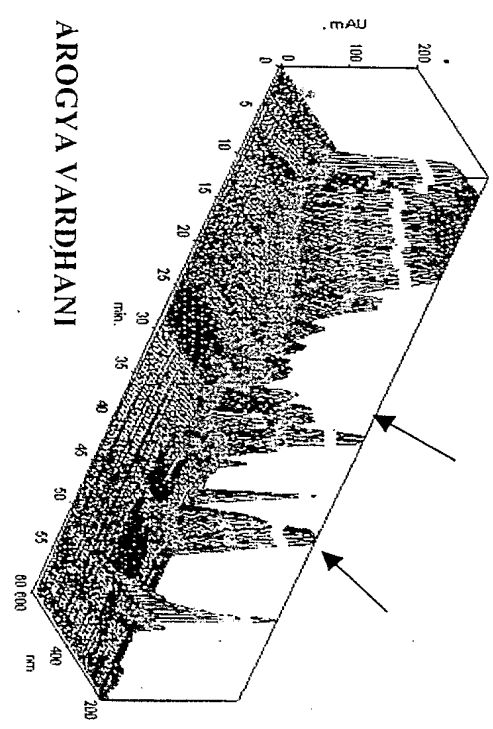
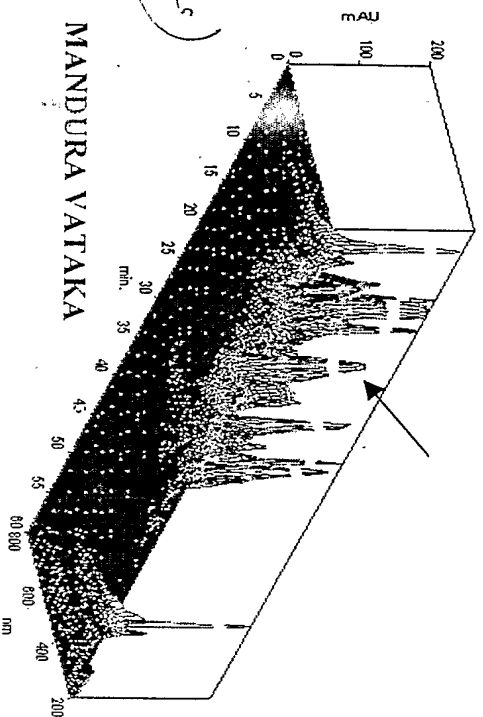
HERBAL FORMULATIONS FOR HEPATITIS

FIG 64



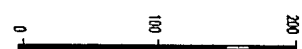
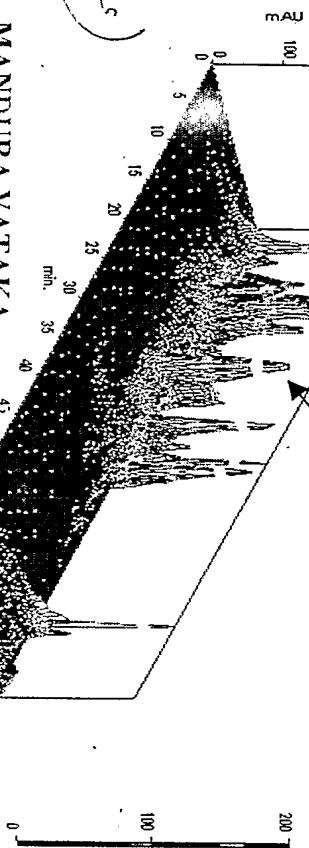
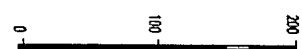
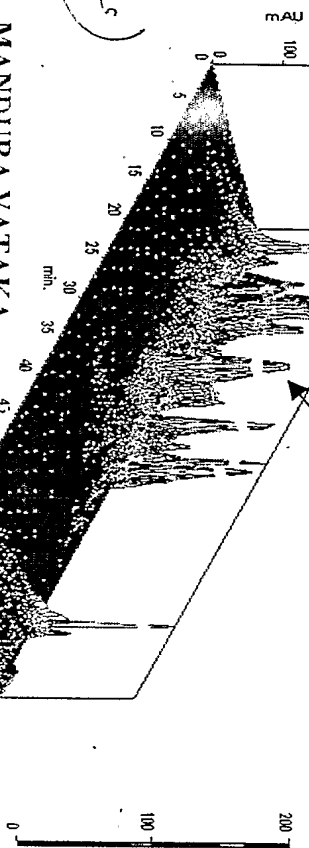
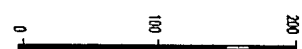
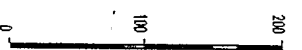
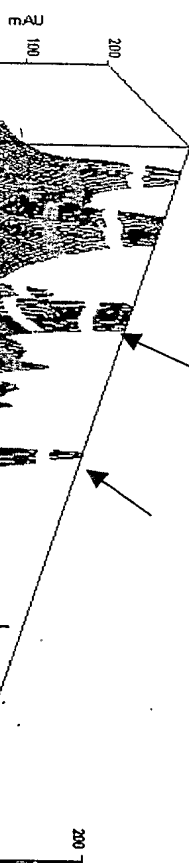
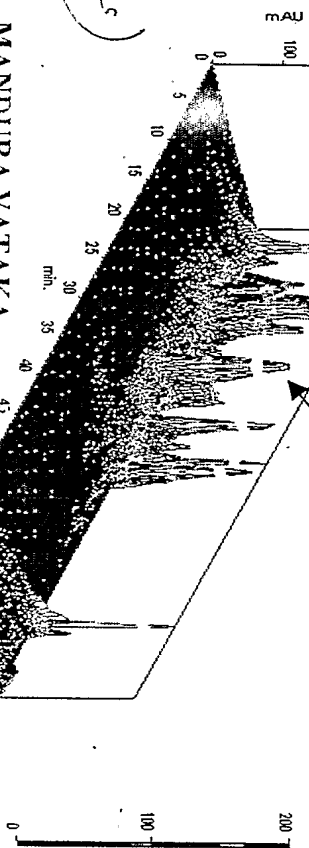
HEPATO-PROTECTIVE FORMULATION

CHOPACHEENYADI CHURNAM



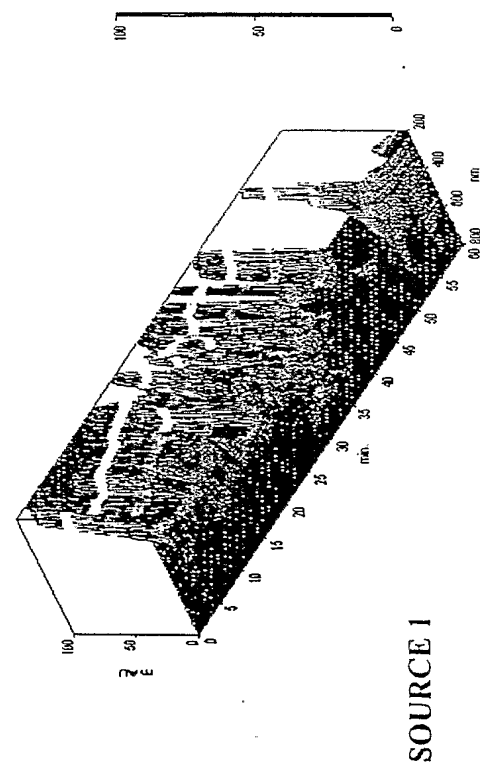
MANDURA VATAKA

AROGYA VARDHANI

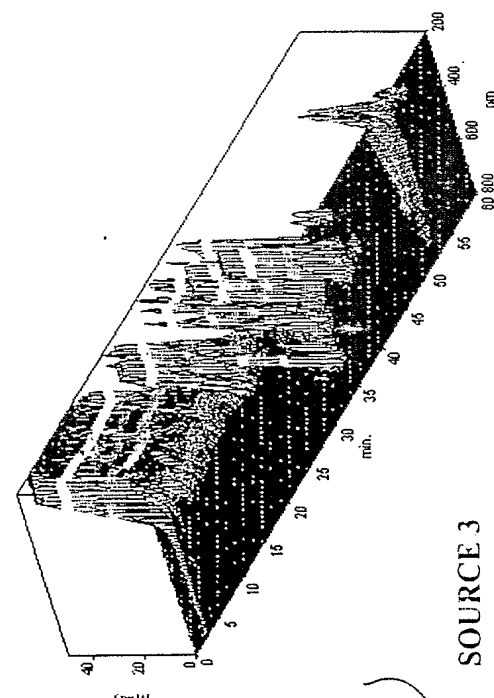


HERBAL FORMULATIONS FOR DIABETES MELLITUS

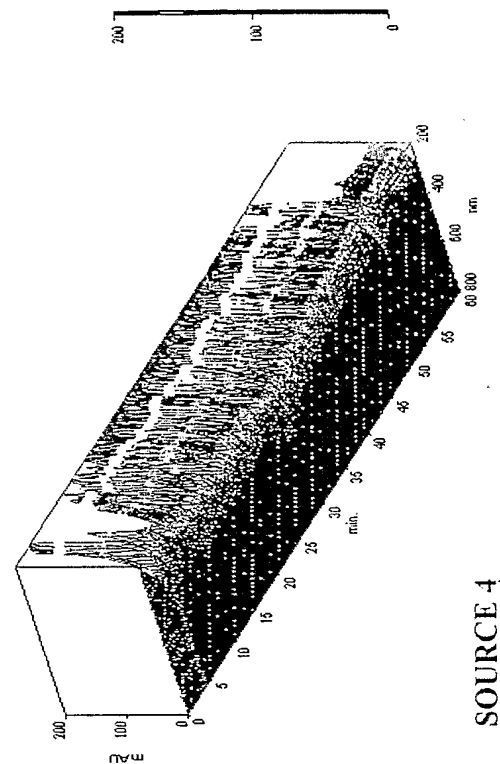
2-D CHROMATOGRAPHIC DATABASE OF MEDICINES FORMULATIONS IN A DIABETIC MEDICINE



DICHROMATOGRAPHIC DATABASE OF MEDICINES FORMULATIONS IN DIABETIC MEDICINE 1



DICHROMATOGRAPHIC DATABASE OF MEDICINES FORMULATIONS IN A DIABETIC MEDICINE FROM UNANI

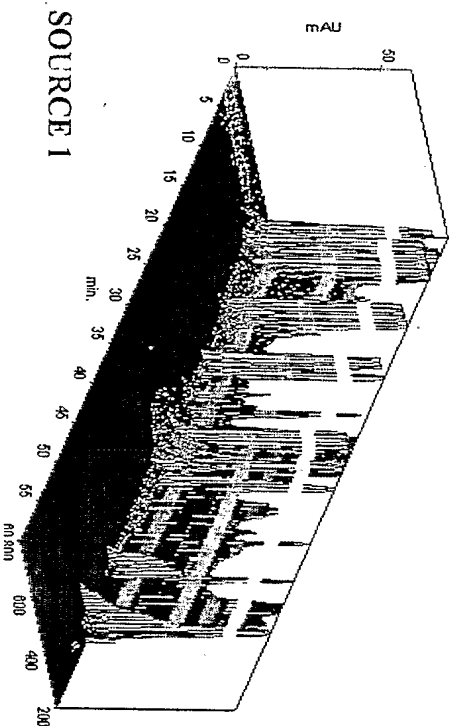


Offprint
(Rm 511-10)

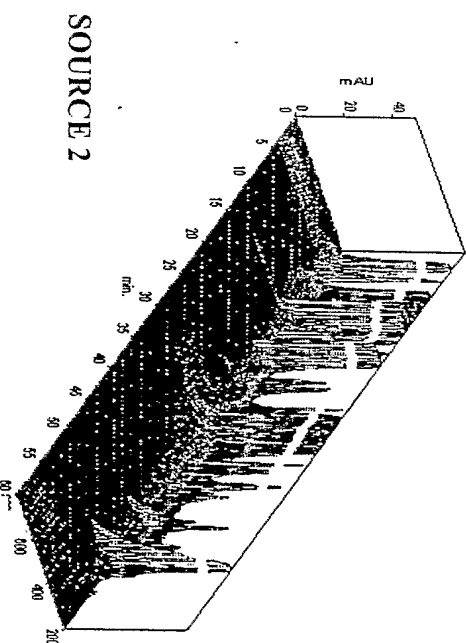
HERBAL FORMULATIONS FOR PSORIASIS

FIG 66

MED. FOR PSORIASIS



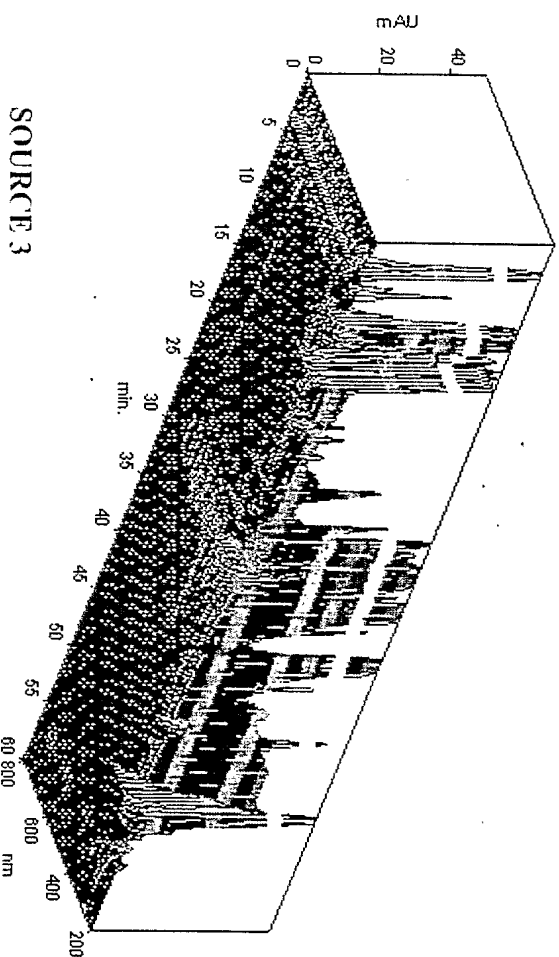
MED. FOR PSORIASIS



SOURCE 1

SOURCE 2

11. PSORIASIS

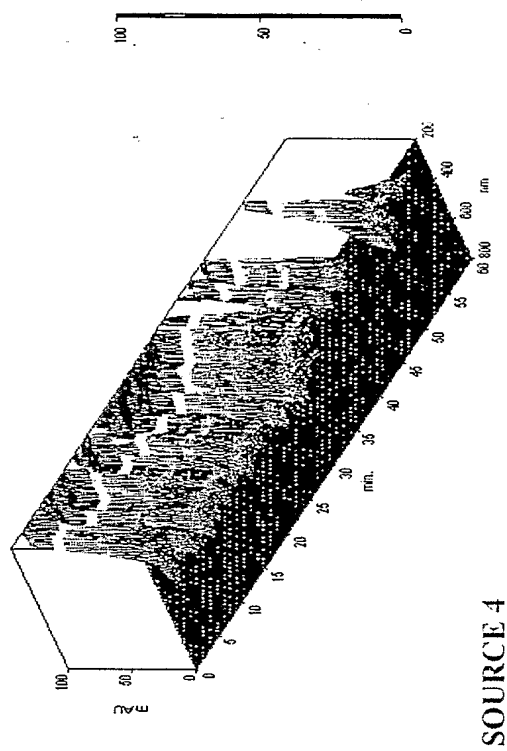
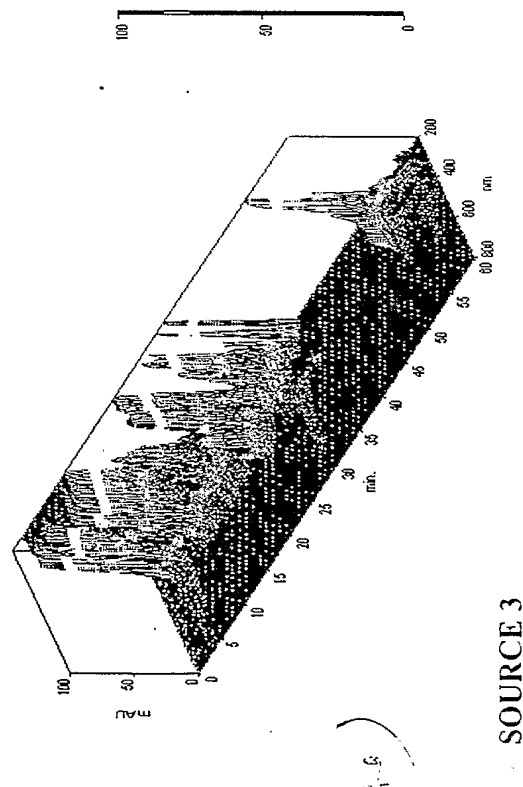
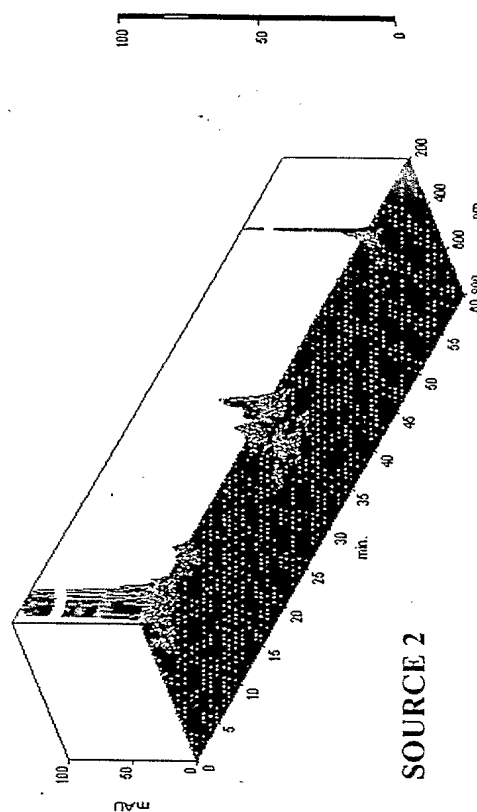
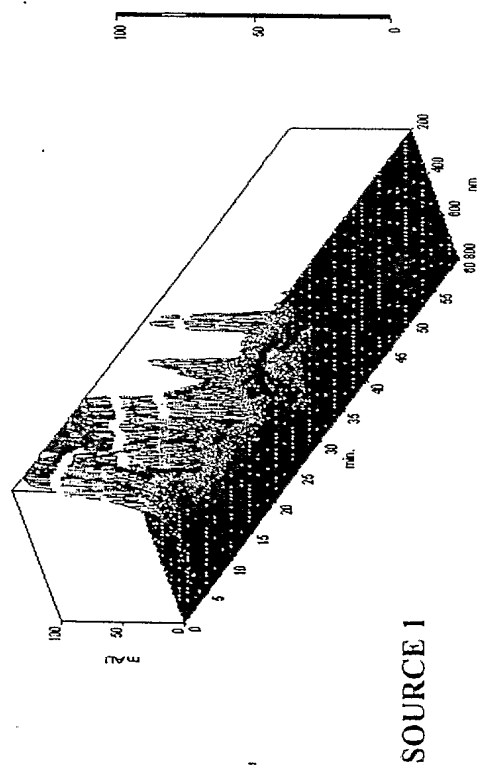


SOURCE 3

Dr. R. P. Srinivas

FIG 67

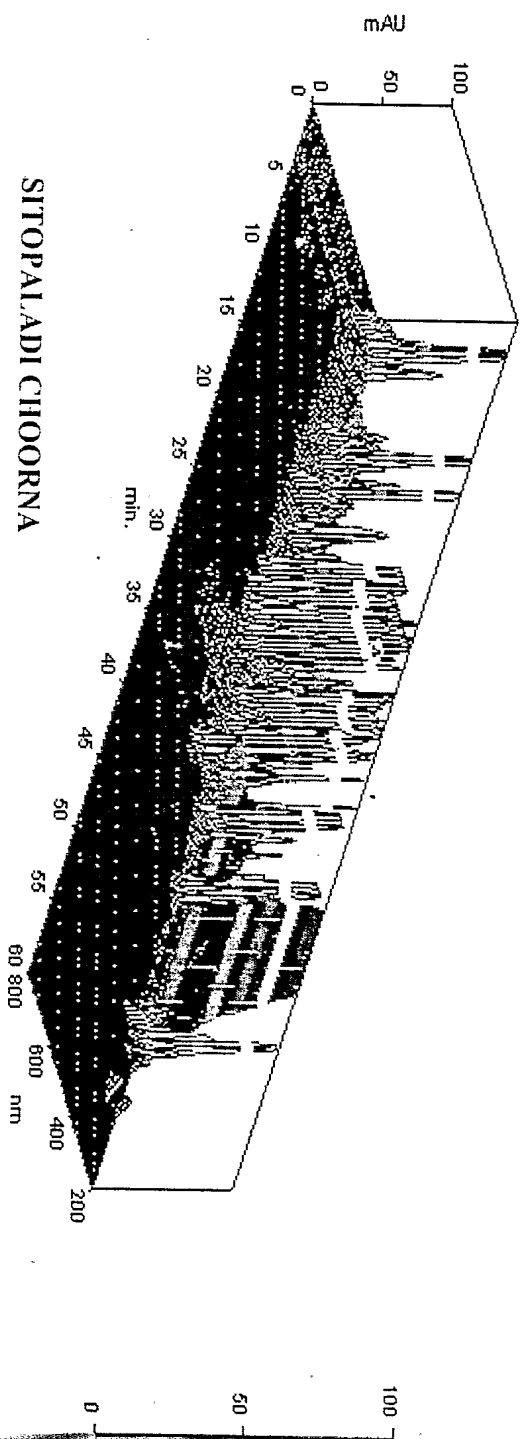
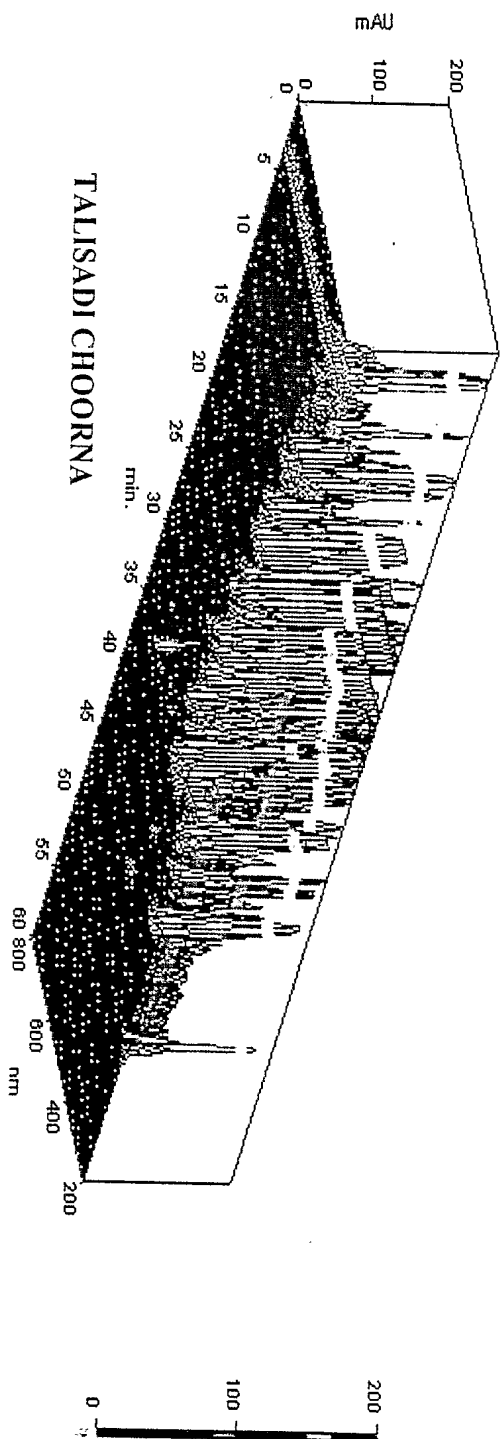
HERBAL FORMULATIONS FOR VITILIGO



Handwritten signature
 (Rup Singh)

CLASSICAL FORMULATIONS USED IN BRONCHIAL DISORDERS

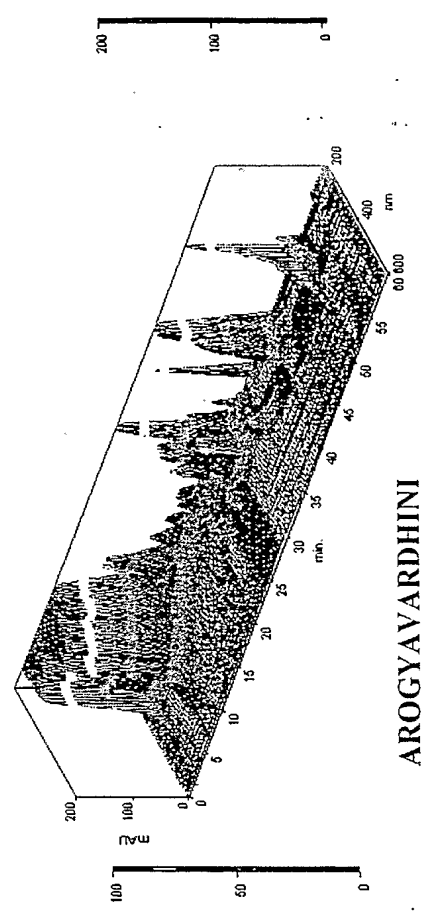
FIG 68



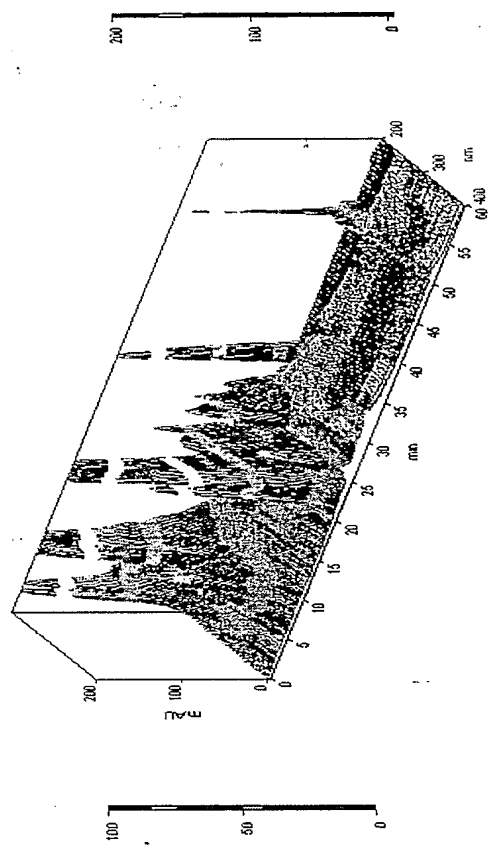
(Signature)
R. V. Srinivas

CLASSICAL FORMULATIONS (I)

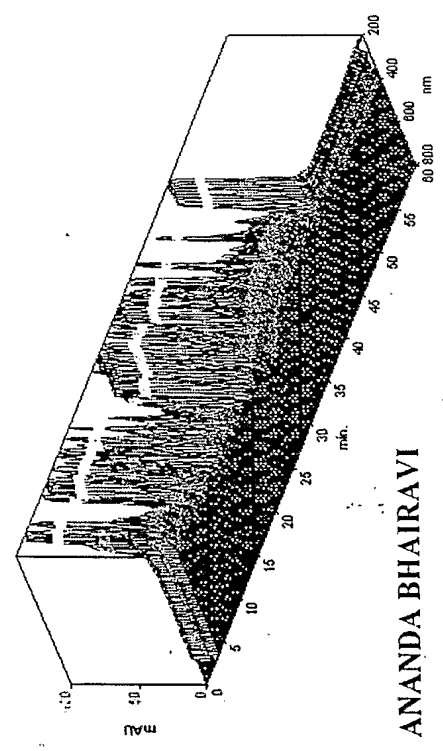
DIND 1 AYURVEDIC FORMULATIONS-21, AROGYAVARDHINI



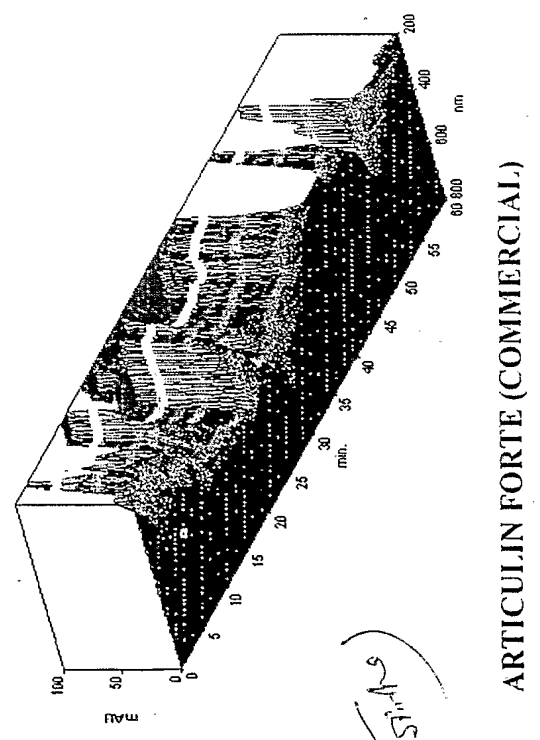
DIND 1 AYURVEDIC FORMULATIONS-21, CHOPACHINYADI CHURNAM



DICHROMATOGRAPHIC DATABASE OF MEDICINES FORMULATIONS11



DICHROMATOGRAPHIC DATABASE OF MEDICINES FORMULATIONS1, ARTICULIN FORTE

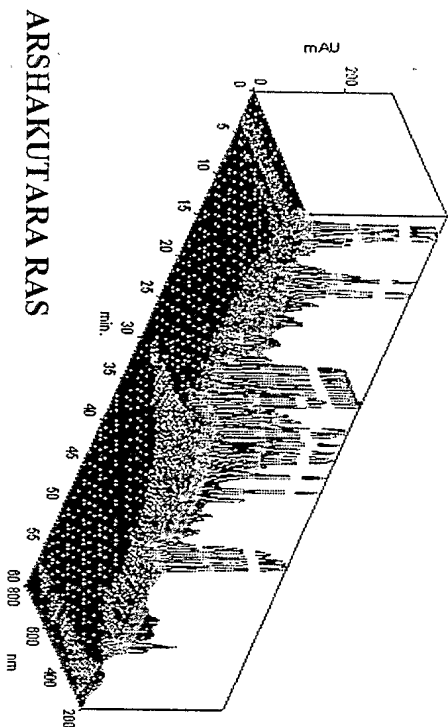


Dr. S. S. S. S.
(Dr. S. S. S. S.)

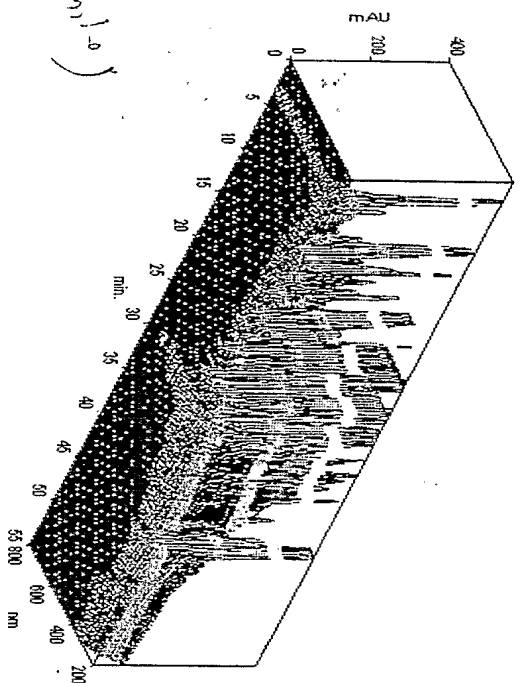
CLASSICAL FORMULATIONS (2)

FIG 70

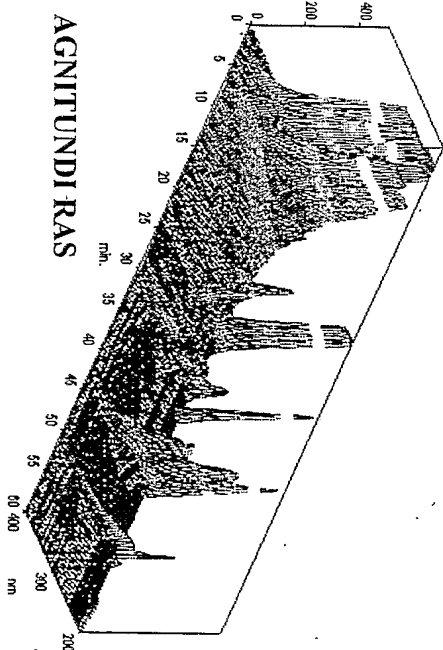
HICHROMATOGRAPHIC DATABASE OF MEDICINES: ARSHA KUTARA RAS



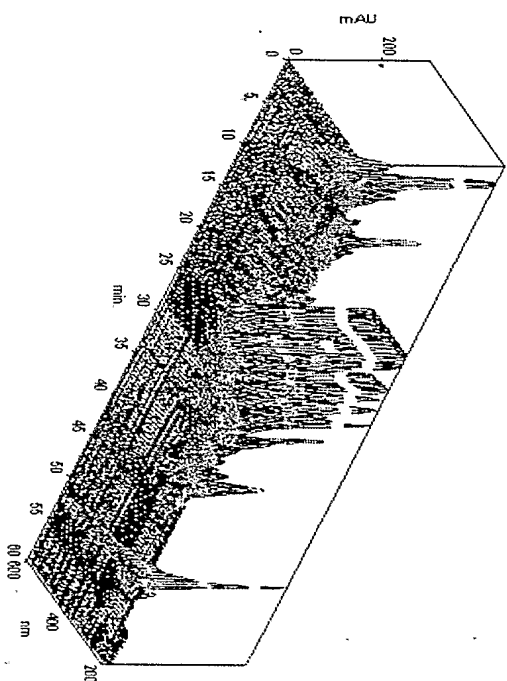
HICHROMATOGRAPHIC DATABASE OF MEDICINES: AGNI KUMARA RAS



DIVID 1AYURVEDIC FORMULATIONS-21: AGNITUNDI RAS



DIVID 1AYURVEDIC FORMULATIONS-21: ANANDABHARAVI



AGNIKUMARA RAS

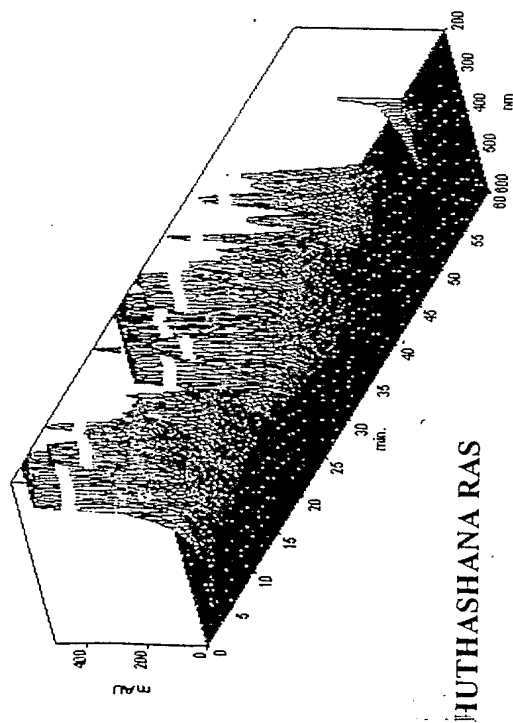
ANANDABHARAVI RAS

Dr. P. Srinivas

CLASSICAL FORMULATIONS (3)

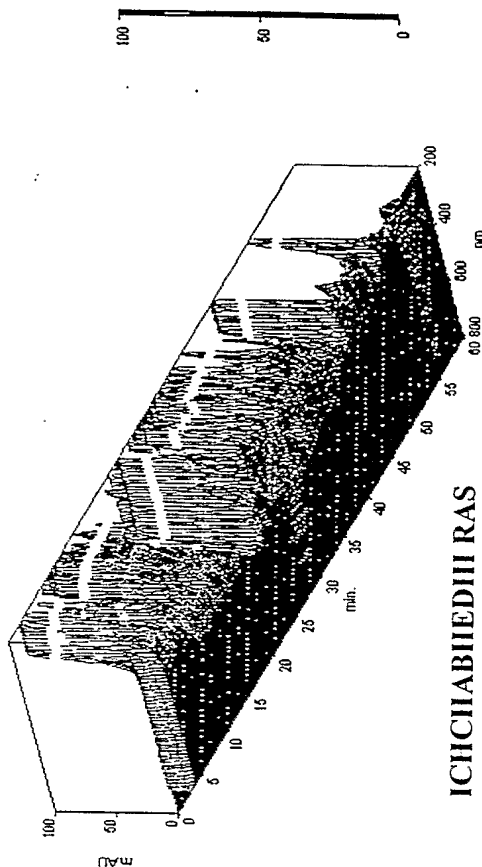
FIG 71

DIND 1AYURVEDIC FORMULATIONS: 211 HUTHASANA



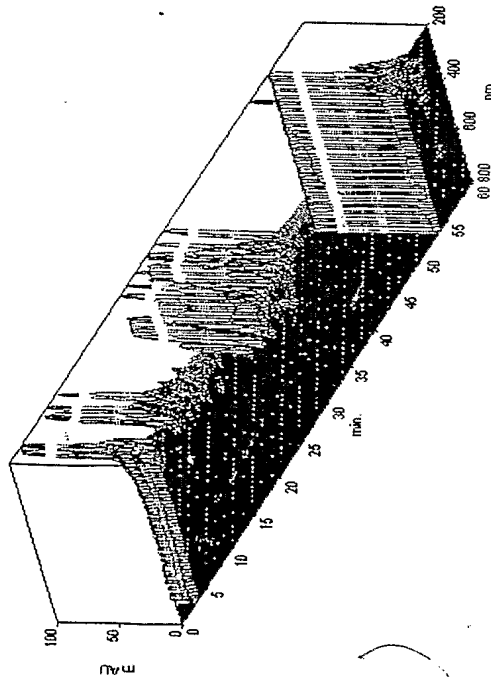
HUTHASANA RAS

DICHROMATOGRAPHIC DATABASE OF MEDICINES FORMULATIONS: 11 ICHHA BHEDI RASA



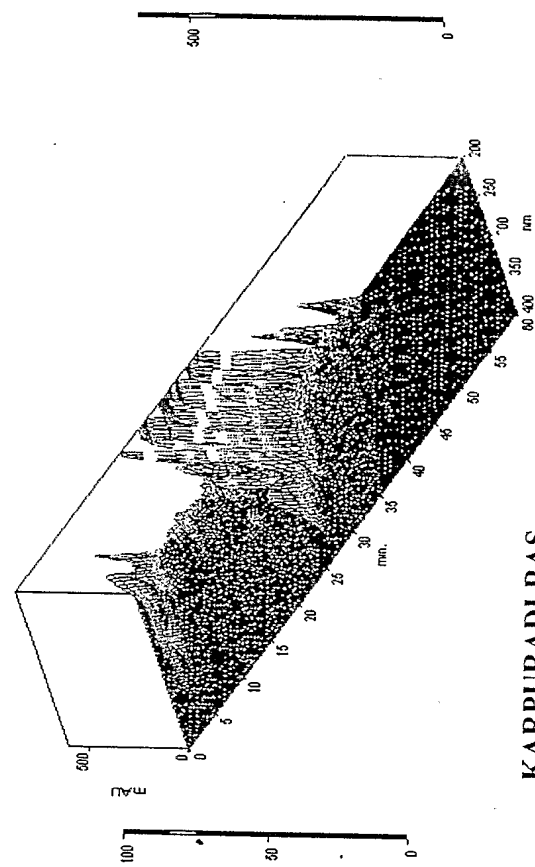
ICHHA BHEDI RAS

DICHROMATOGRAPHIC DATABASE OF MEDICINES FORMULATIONS: 11 KAPHA KETU RASA



KAPHA KETU RAS

DIND 1AYURVEDIC FORMULATIONS: 211 KARPURADI RASA



KARPURADI RAS

(Handwritten signature)

CLASSICAL FORMULATIONS (4)

FIG 72

DICHROMATOGRAPHIC DATABASE OF MEDICINES FORMULATIONS-1. SRI CHANDRAMRUTH RAS

SRI CHANDRAMRUTH RAS

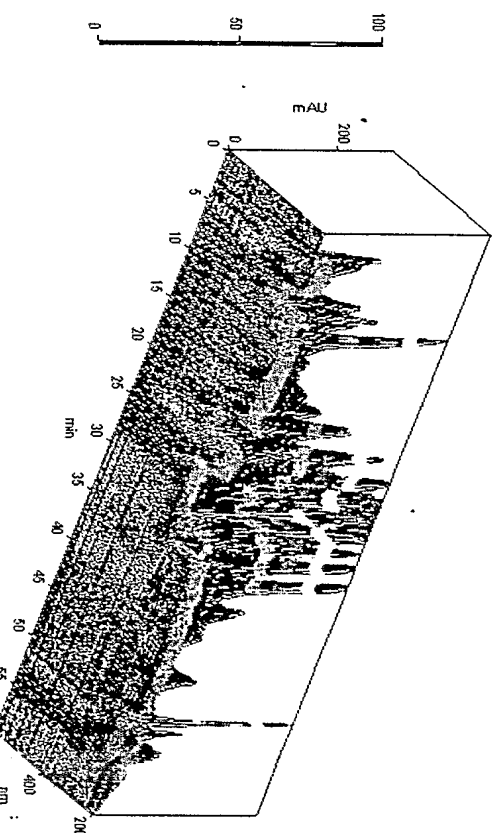
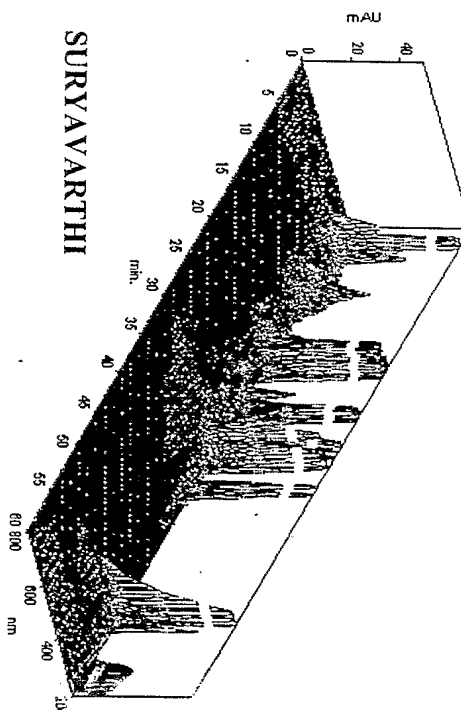
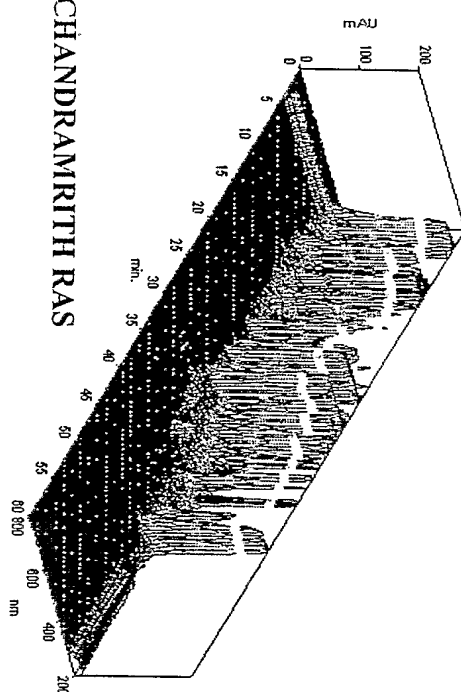
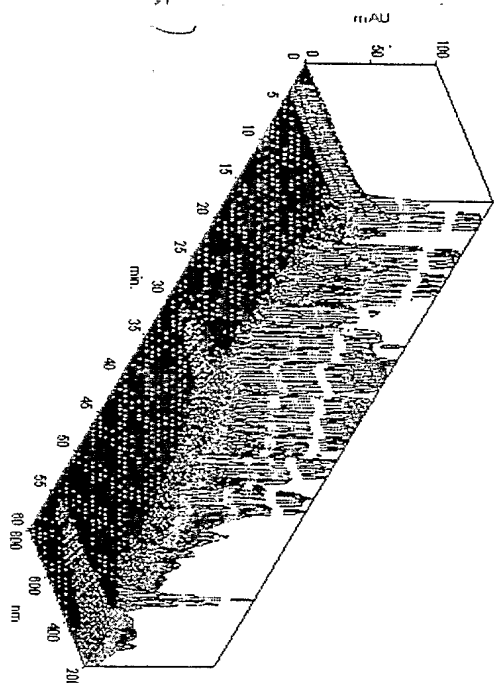
SURYAVARTHI

DICHROMATOGRAPHIC DATABASE OF MEDICINES FORMULATIONS-1. TRIBHUVANA KEERTHI RAS

DINDIMURVEDIC FORMULATIONS-211 SUVARNA YOGA RAJA GUGGULU

TRIBHUVANA KEERTI RAS

MAHA SUVARNA YOGA RAJA GUGGULU

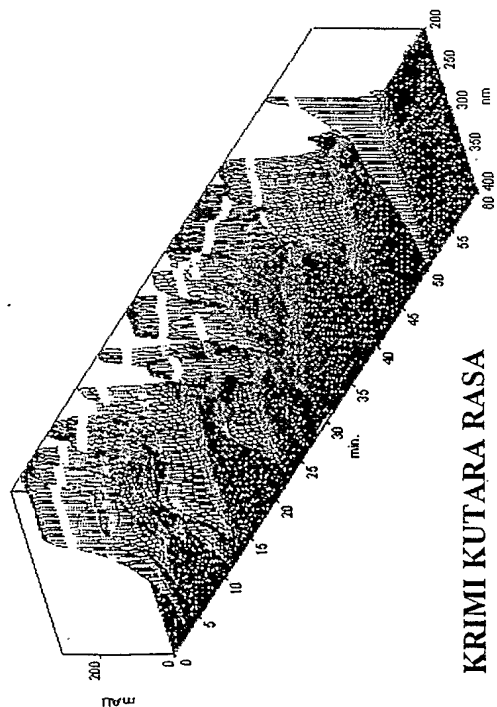


Dr. S. S. Srinivasan

CLASSICAL FORMULATIONS (5)

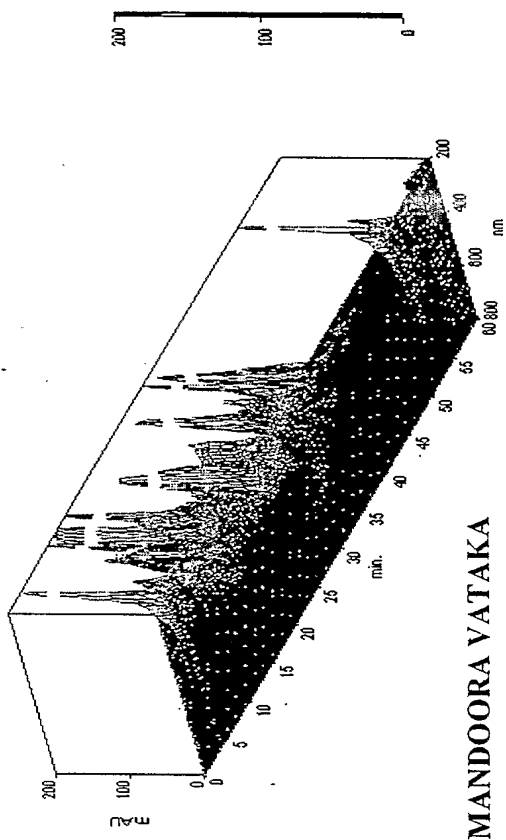
FIG 73

DINDI AYURVEDIC FORMULATIONS-211. KRIMI KUTARA RASA



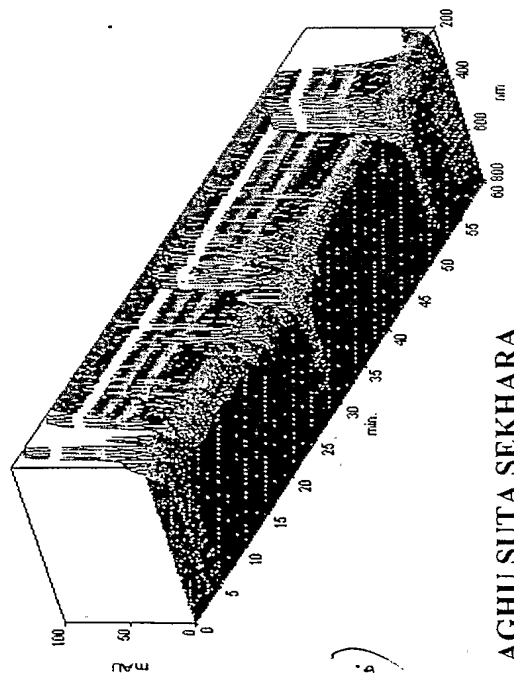
KRIMI KUTARA RASA

EXGOMUTRAI MANDUAVATAKA



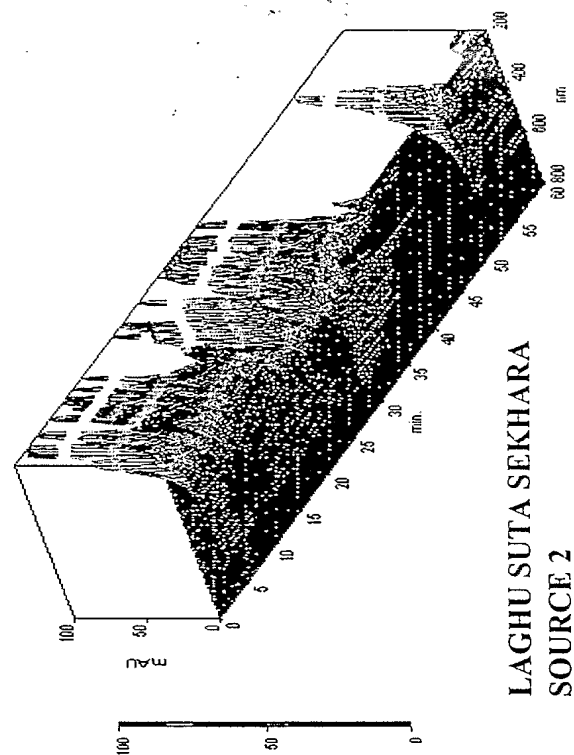
MANDOORA VATAKA

DICHROMATOGRAPHIC DATABASE OF MEDICINES FORMULATIONS 11. LAGHU SUTA SEKHARA



LAGHU SUTA SEKHARA
SOURCE 1

DICHROMATOGRAPHIC DATABASE OF MEDICINES FORMULATIONS 11. LAGHU SOOTHA SEKHARA



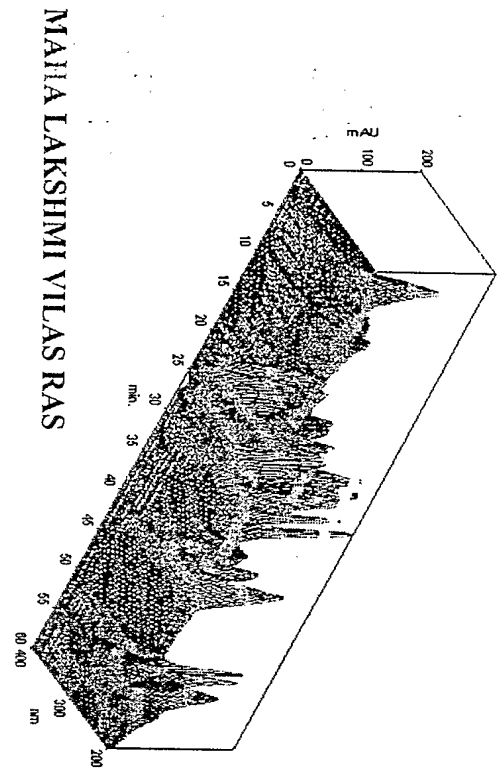
LAGHU SUTA SEKHARA
SOURCE 2

Dr. S. S. S. S. S.

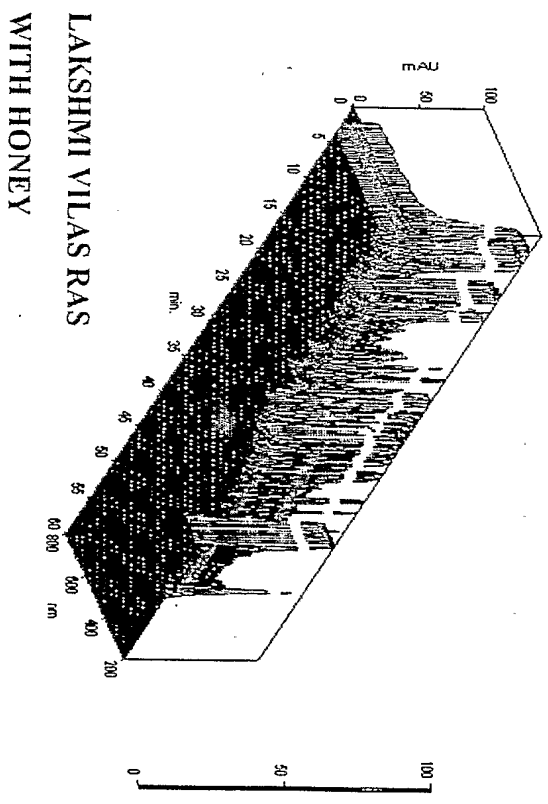
CLASSICAL FORMULATIONS (6)

FIG 74

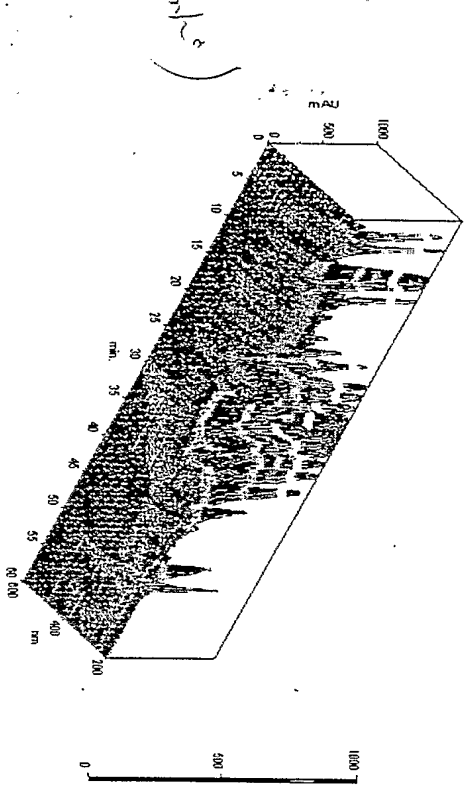
DINDIAYURVEDIC FORMULATIONS-21 MAHALAKSHMI VILAS RAS.



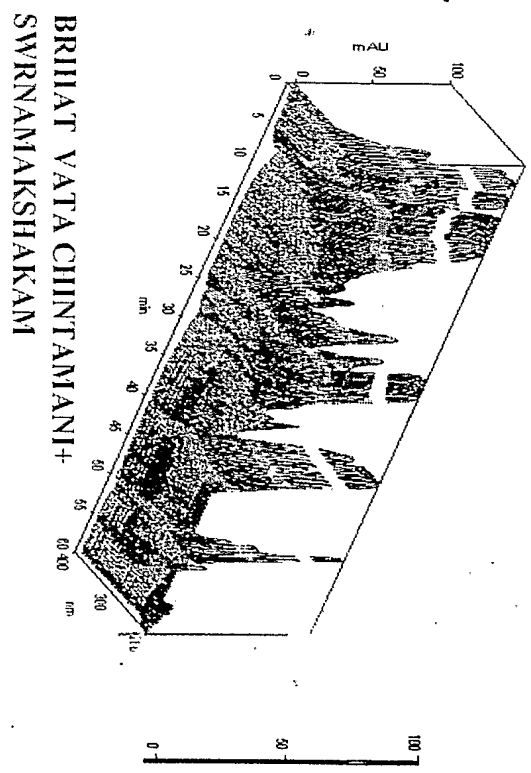
DICHROMATOGRAPHIC DATABASE OF MEDICINE FORMULATIONS1 LAKSHMI VILAS RAS WITH HONEY /



DINDIAYURVEDIC FORMULATIONS-21 MAHA YOGARAJA GUGGUL

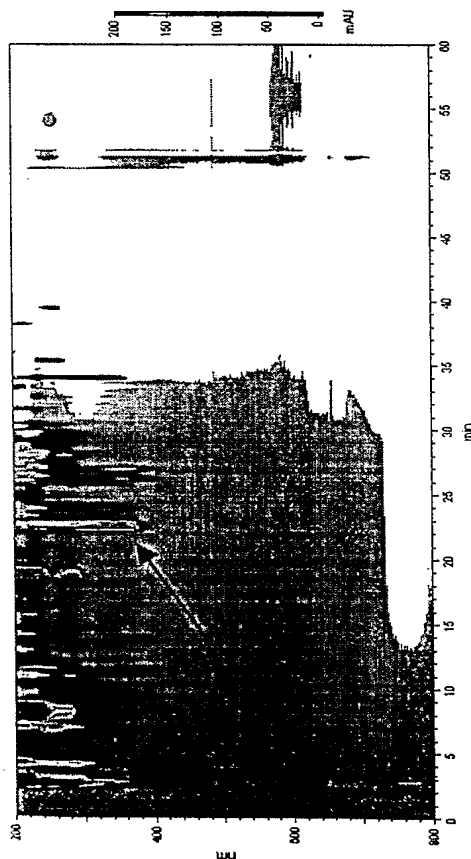


DINDIAYURVEDIC FORMULATIONS-21 BRIHATVATA CHINTAMANI + SWARNAMAKSHAKAM

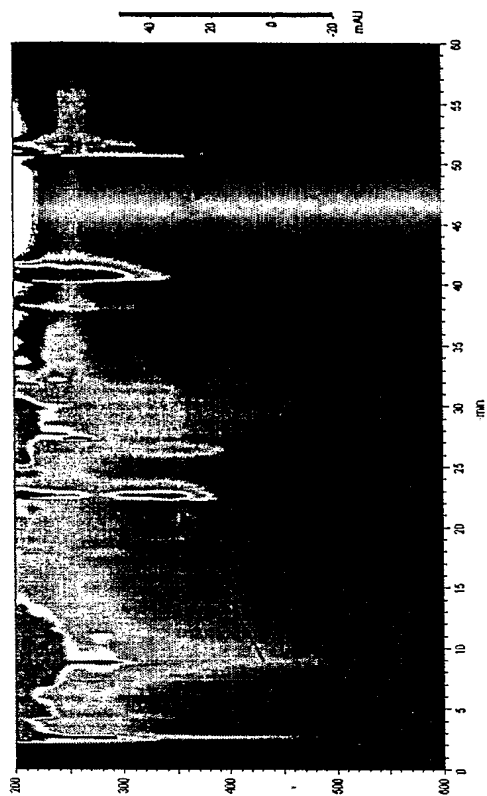


Handwritten signature and text:
Dr. N. S. Srinivas
Dr. N. S. Srinivas

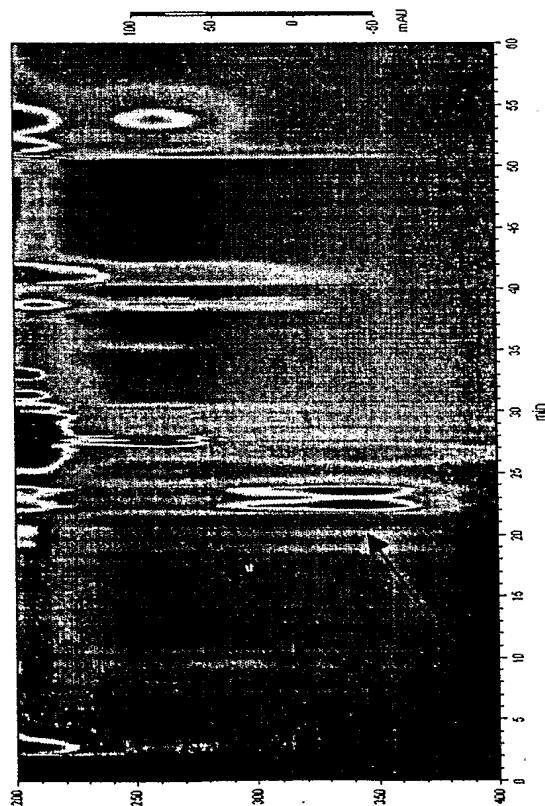
TRADITIONAL MEDICINES WITH GOLD



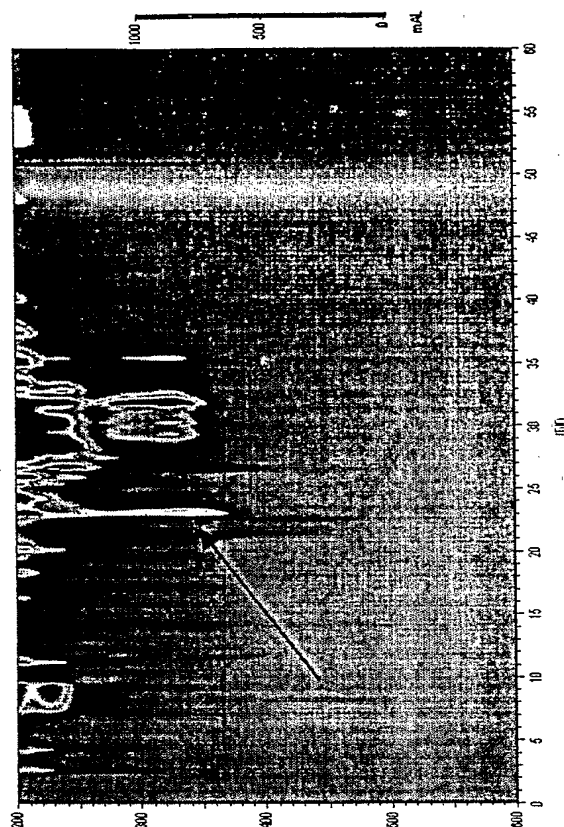
CHANDRAPRABHAVATI + TRIVANGA BHASMA +
SWRANAVANGA BHASMA



BRIHATVATA CHINTAMANI +
SWRNAMAKSHIKAM



MAHALAKSHIMI VILAS RAS

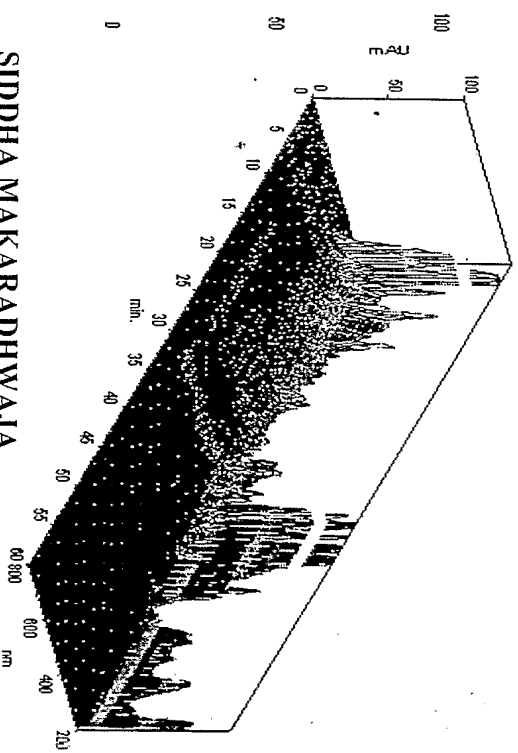
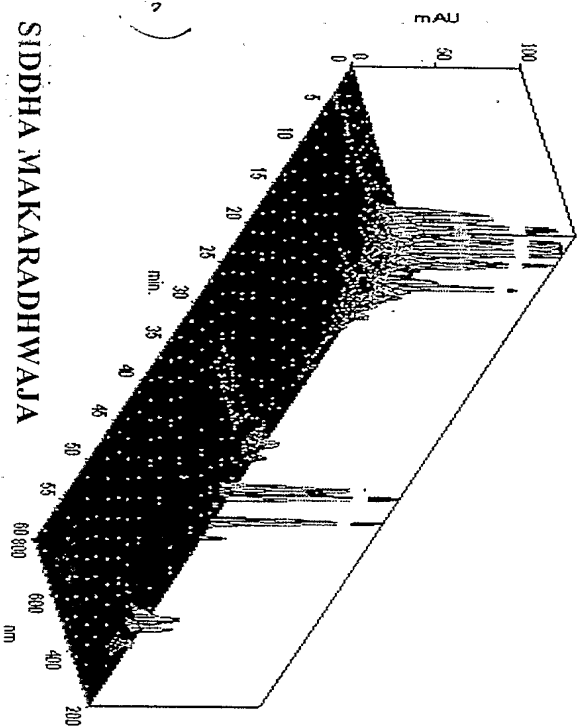
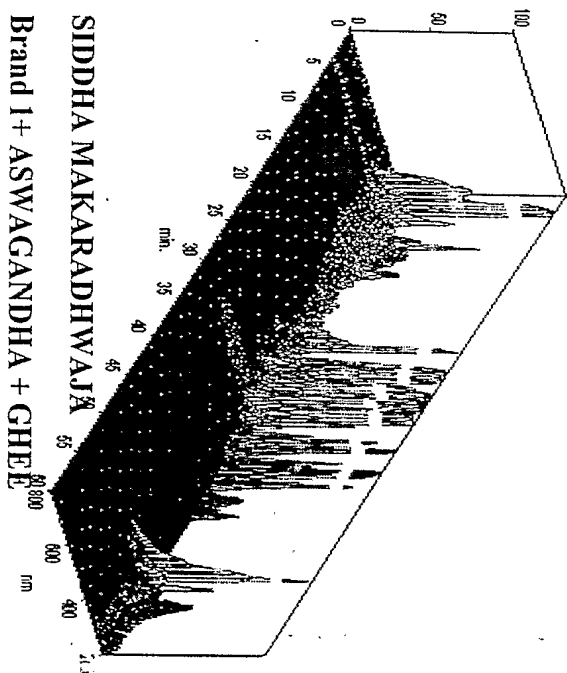
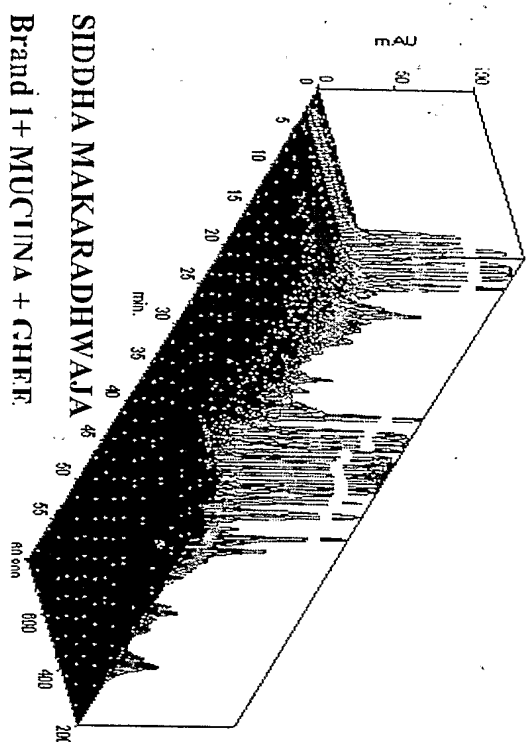


MAHAYOGARAJA GUGGULU

Handwritten signature and text:
R. V. S. Srinivasulu
Dr. V. S. Srinivasulu

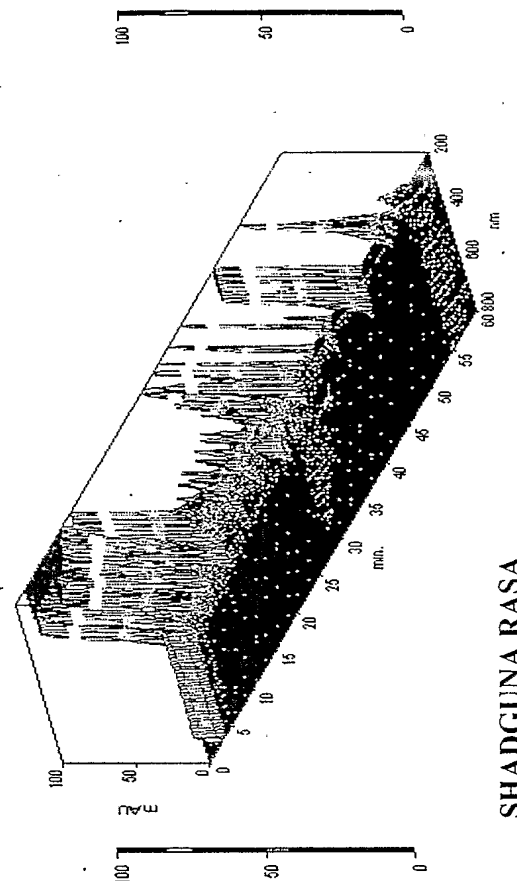
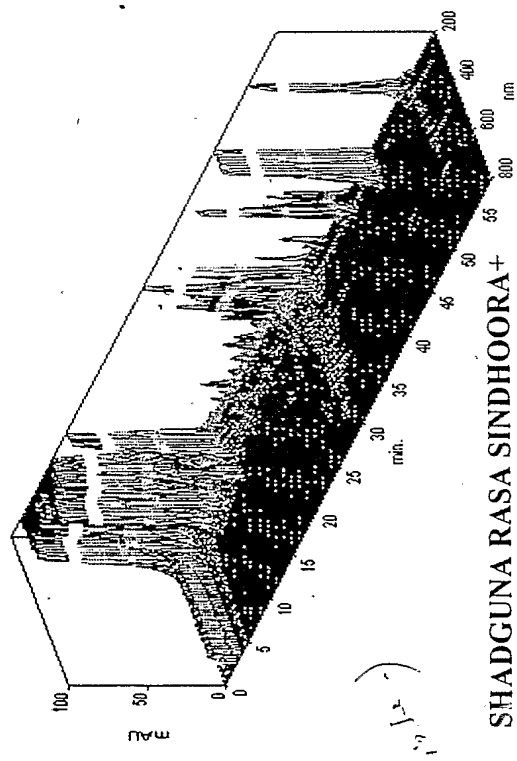
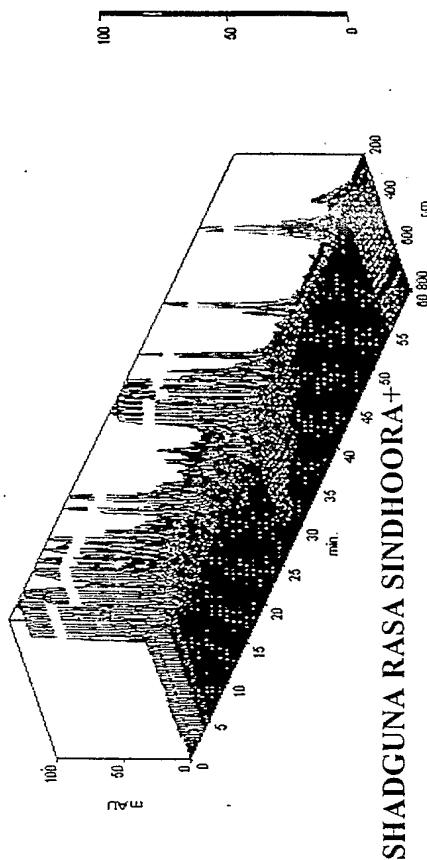
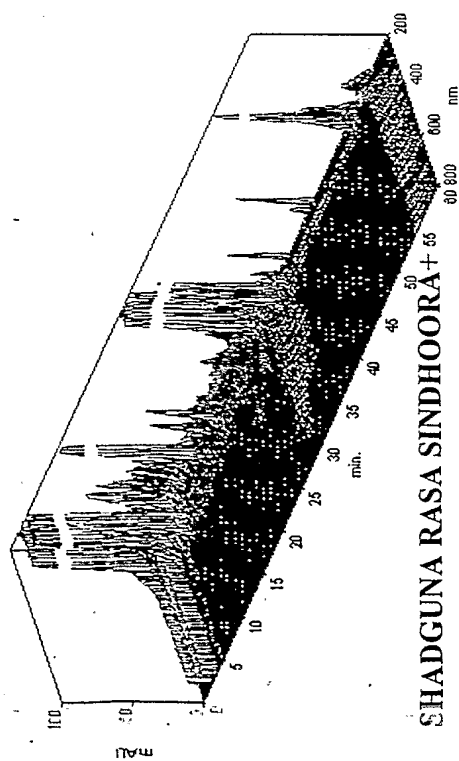
SIDDHA MAKARADHWAJA

FIG 76



(Signature)
R. P. S. S. S. S.

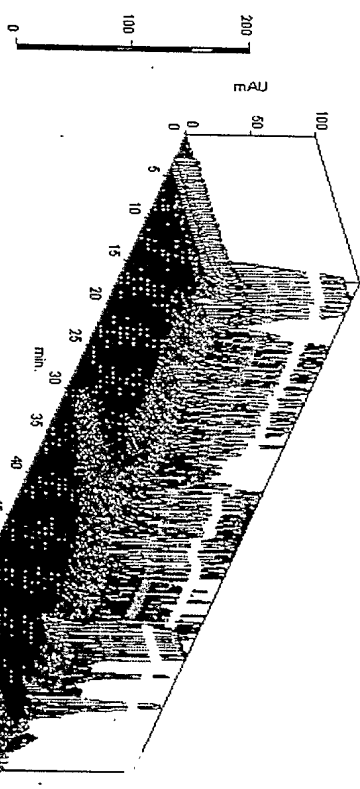
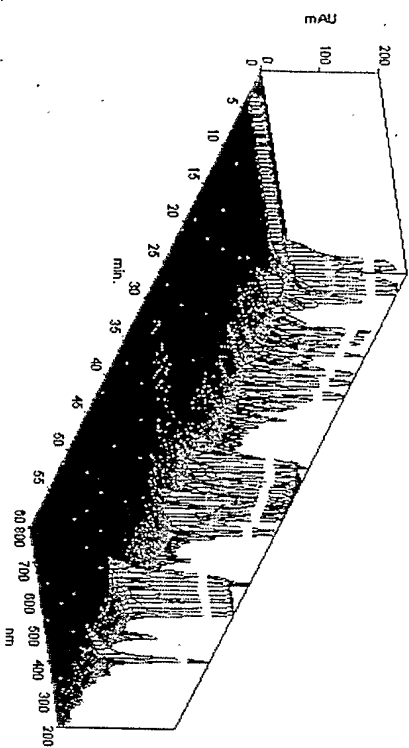
SHADGUNA RASA SINDHOORA WITH ANUPANA



Blank
21/5/2012

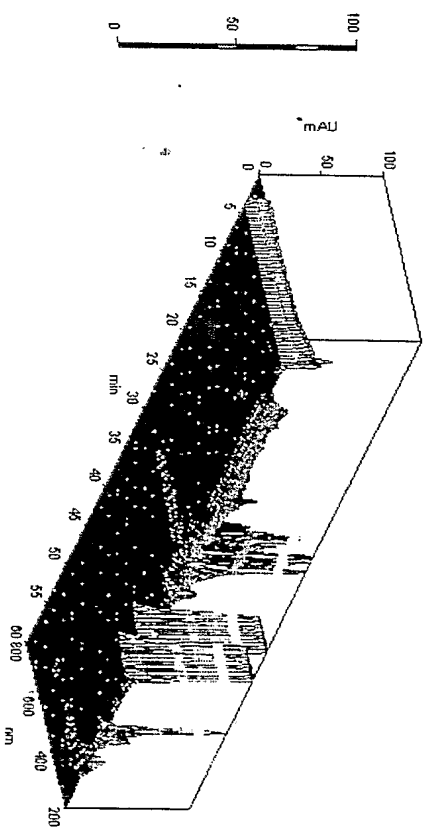
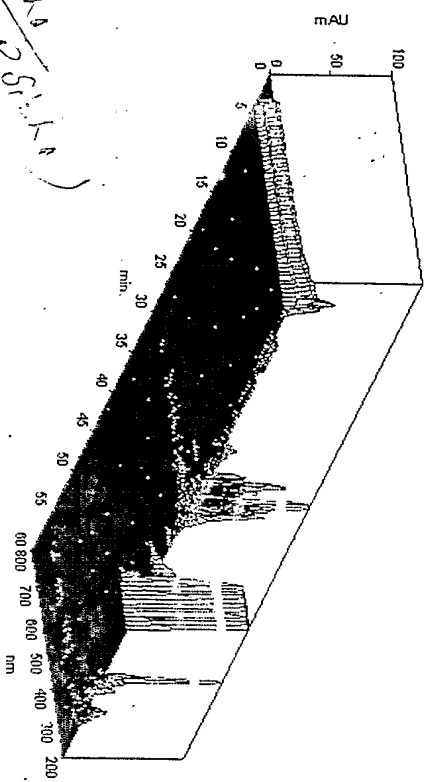
KAJJALI PREPARATIONS

FIG 78



SHADGUNA KAJJALI+ PUSHKARA MOOLA

KAJJALI+ PUSHKARA MOOLA



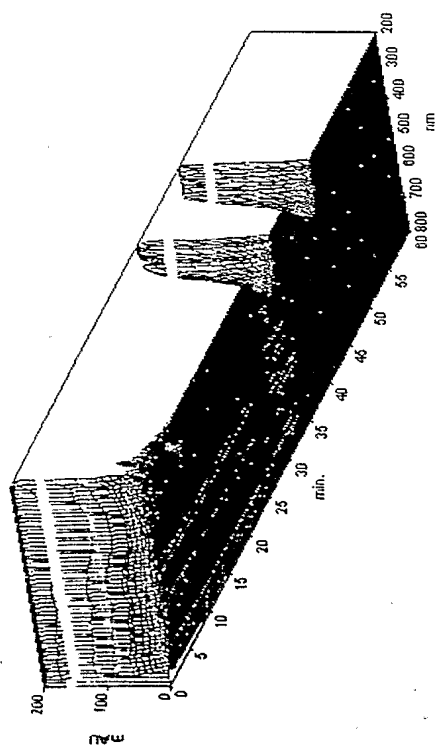
SHADGUNA KAJJALI

KAJJALI

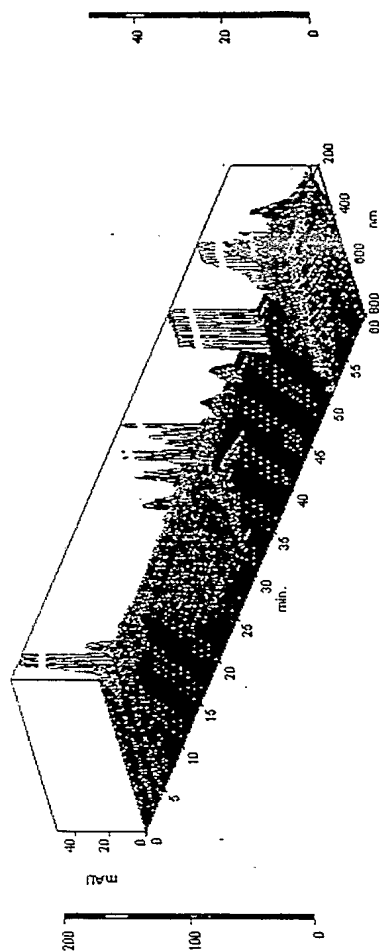
Handwritten signature: R. P. Singh

RASA PARPATI AND SINDHOORA PREPARATIONS

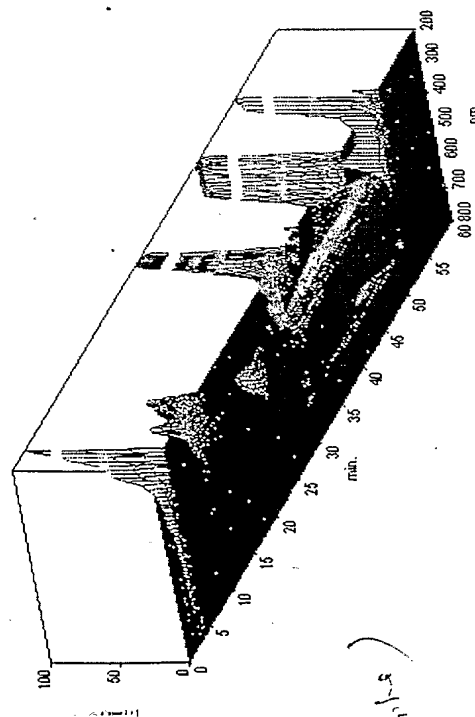
FIG 79



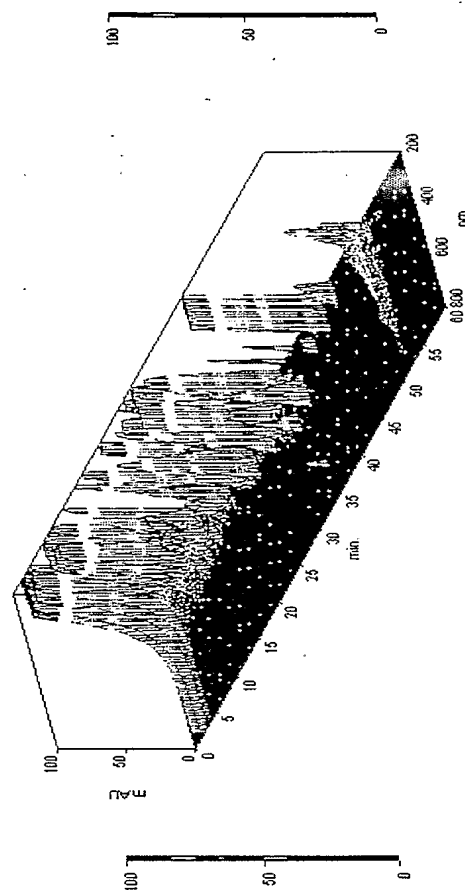
RASA PARPATI SOURCE 1



RASA SINDHOORA



RASA PARPATI SOURCE 2

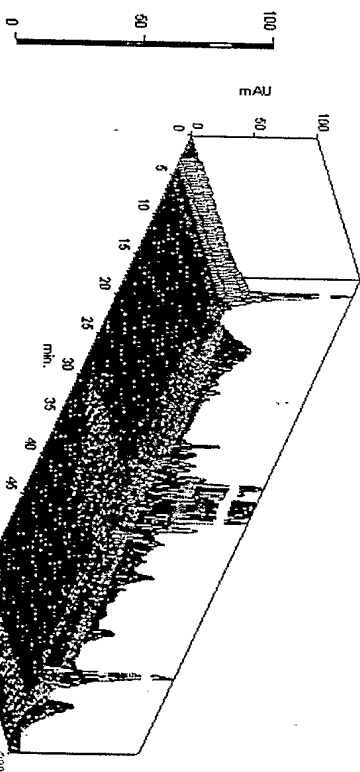
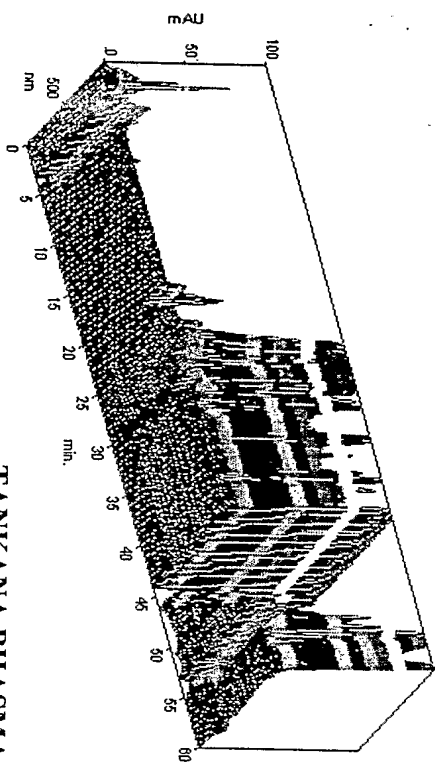


RASA SINDHOORA+
PIPPALI+ HONEY

(Signature)
R. Sindhoora

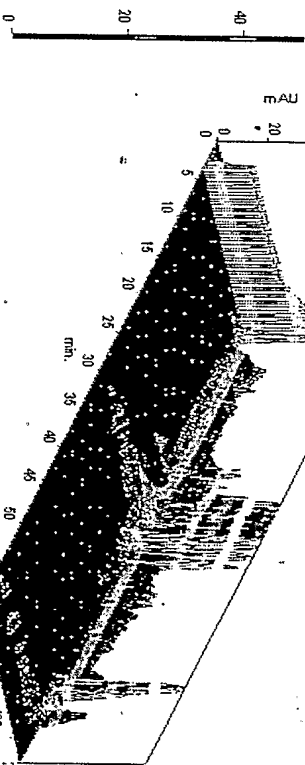
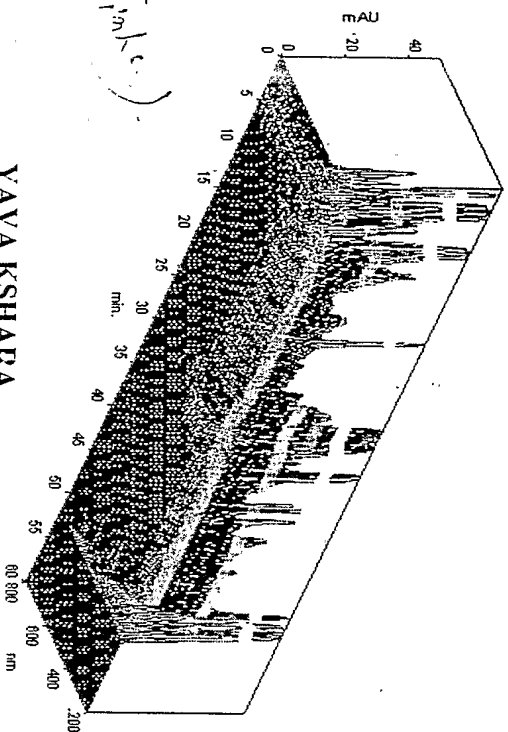
INORGANIC MEDICINES

FIG 80



TANKANA BHASMA

NAVA SARA



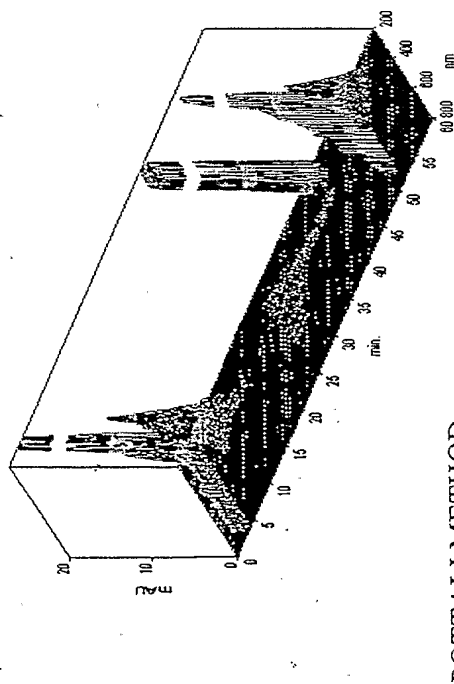
YAVA KSHARA

THAVAKSHEERI

Dr. N. S. Srinivas
Dr. N. S. Srinivas

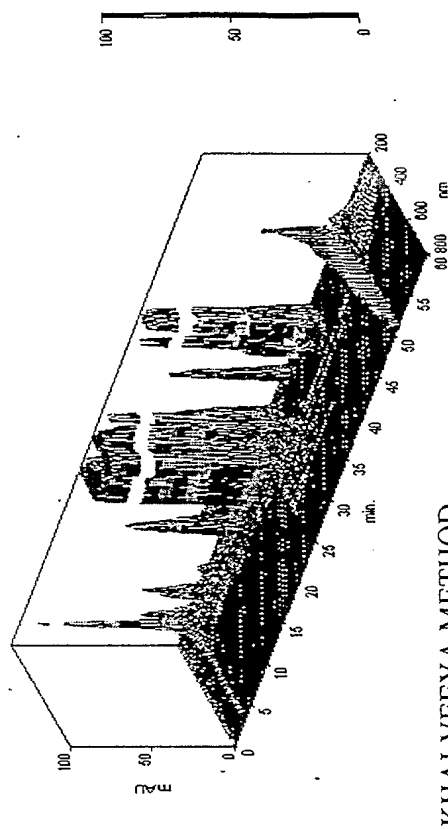
FINGERPRINTS OF HAMSA POTTALI PREPARED IN DIFFERENT METHODS AND ESCA SCAN

H.I.I. HAMSA POTTALI (POTTALI)



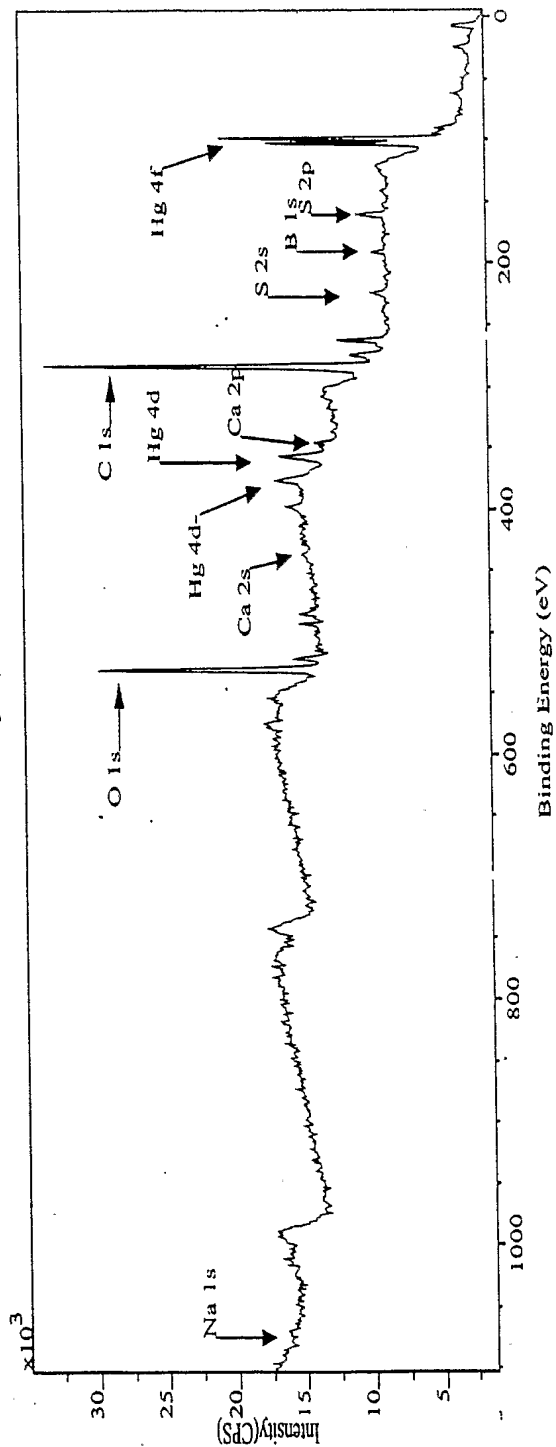
POTTALI METHOD

H.I.I. HAMSA POTTALI (KHALVEEYA)



KHALVEEYA METHOD

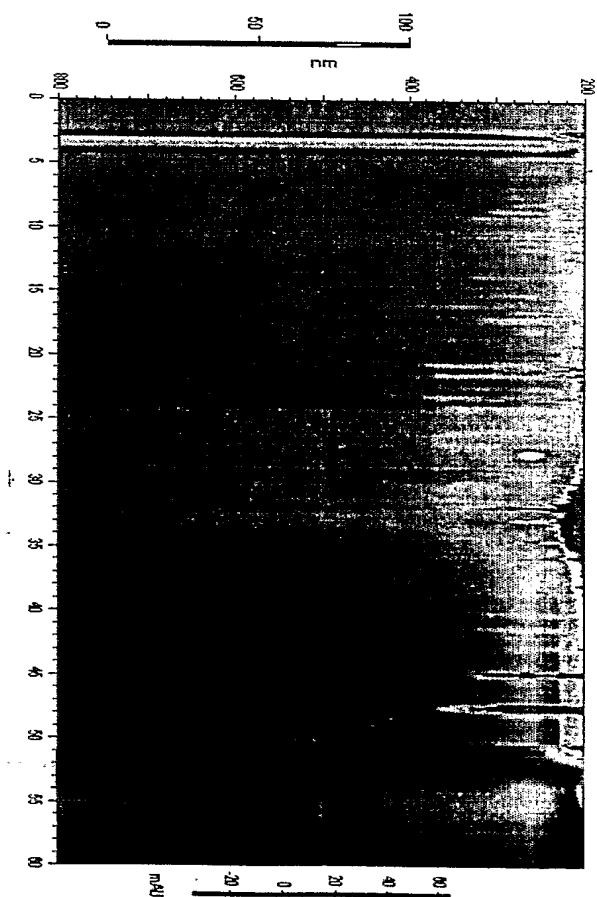
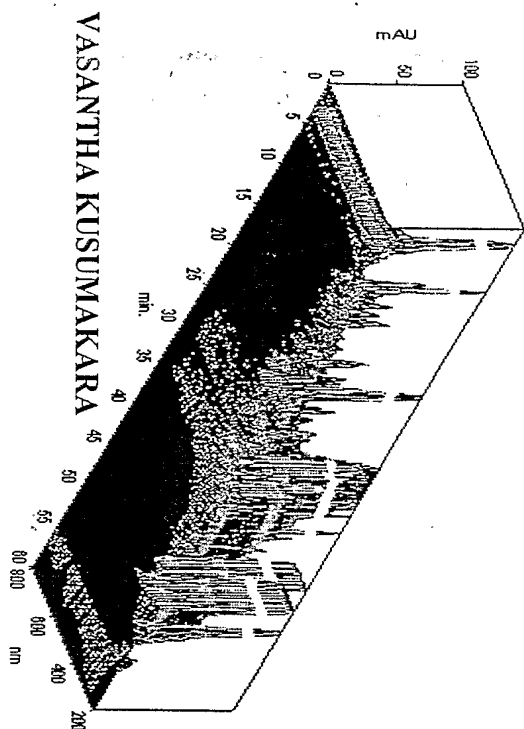
Survey:1(HK-1)



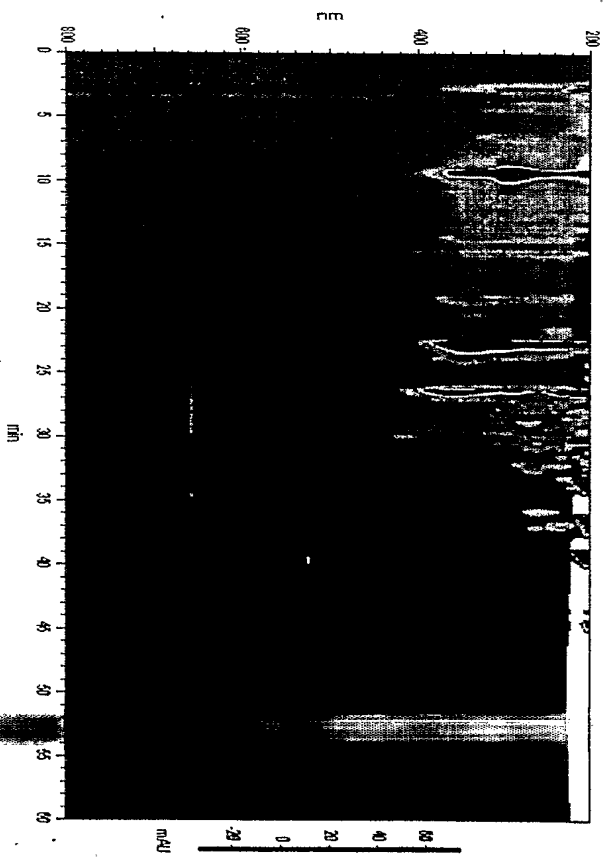
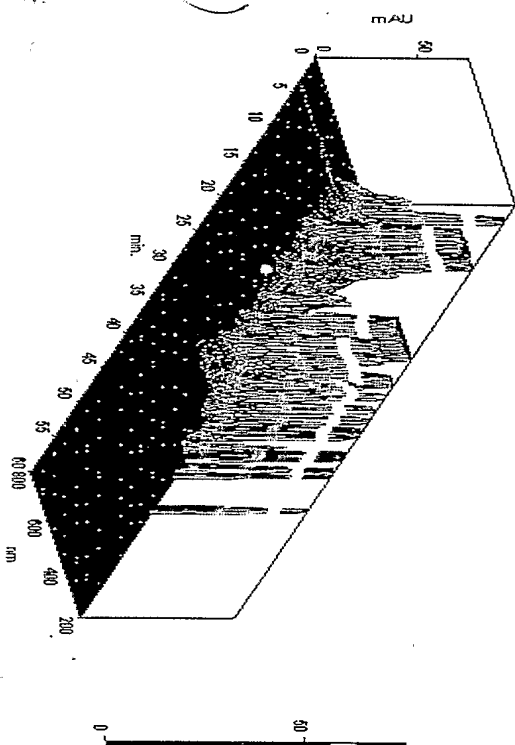
[Handwritten signature]
Date: 22/05/2014

SIDDHA MEDICINES (I)

FIG.82



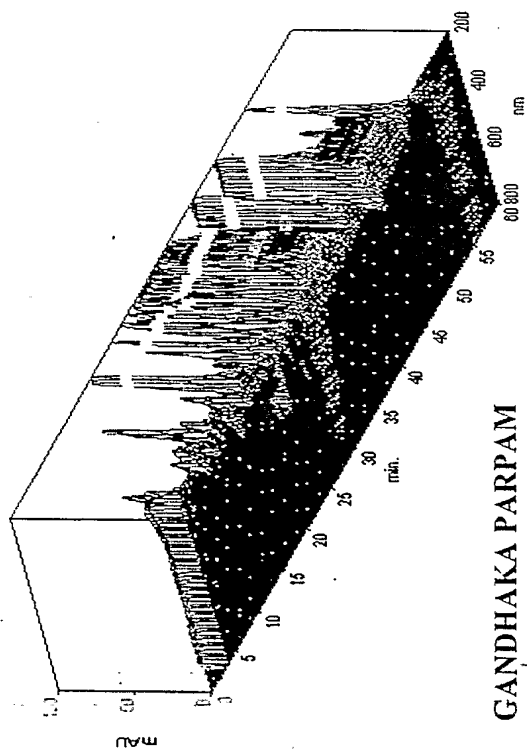
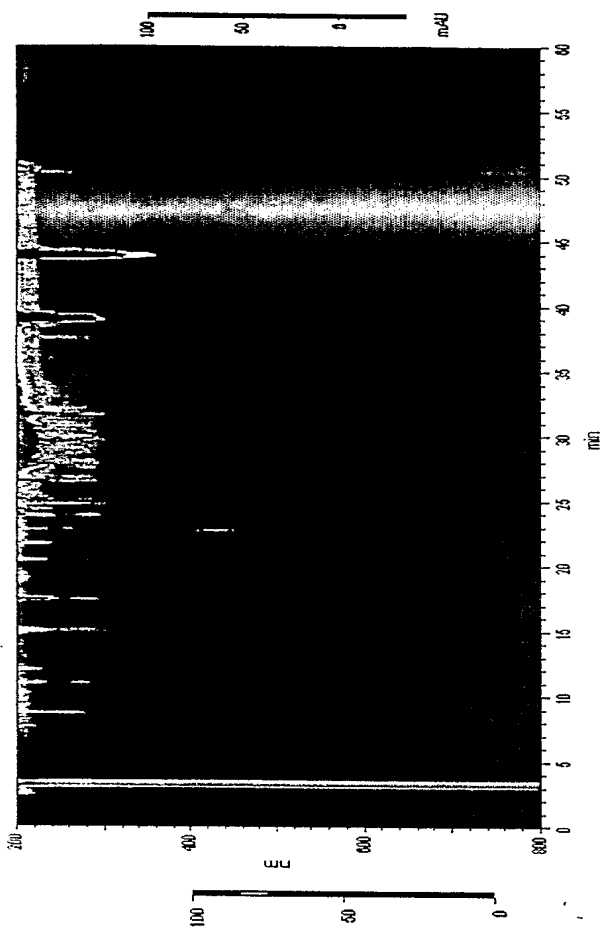
(Signature)
(Date)



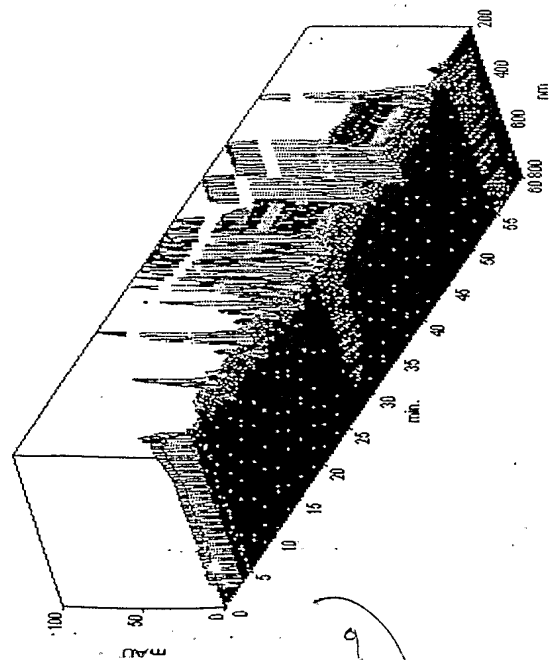
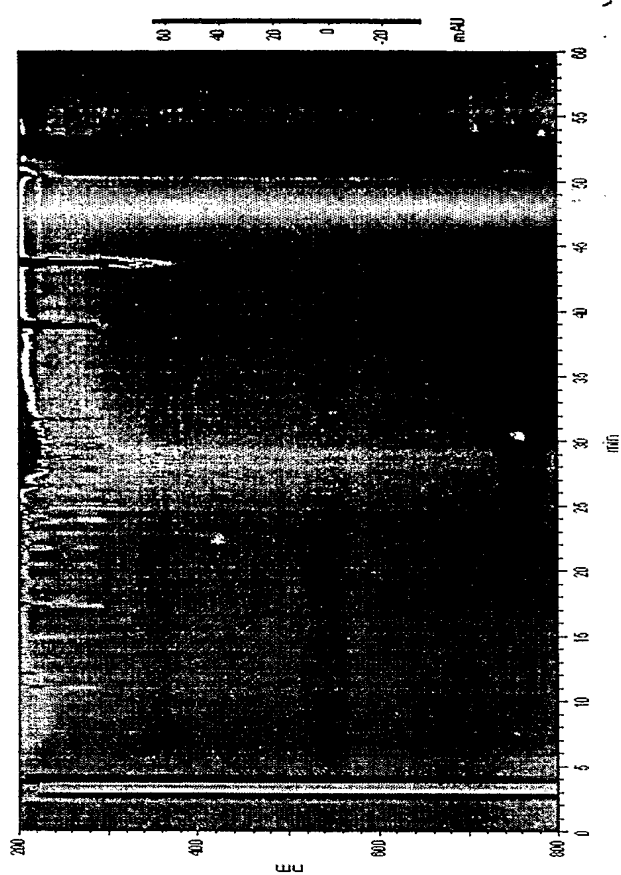
KADIKARA SANDAMRUTHIA SENTHURAM +
 TRIKADUKA CHURNAM

SIDDHA MEDICINES (2)

FIG 83



GANDHAKA PARPAM

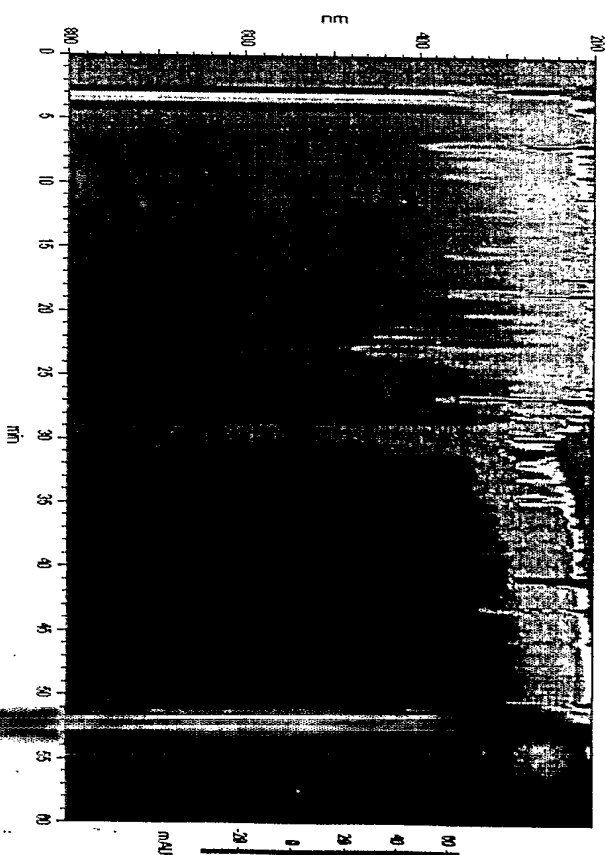
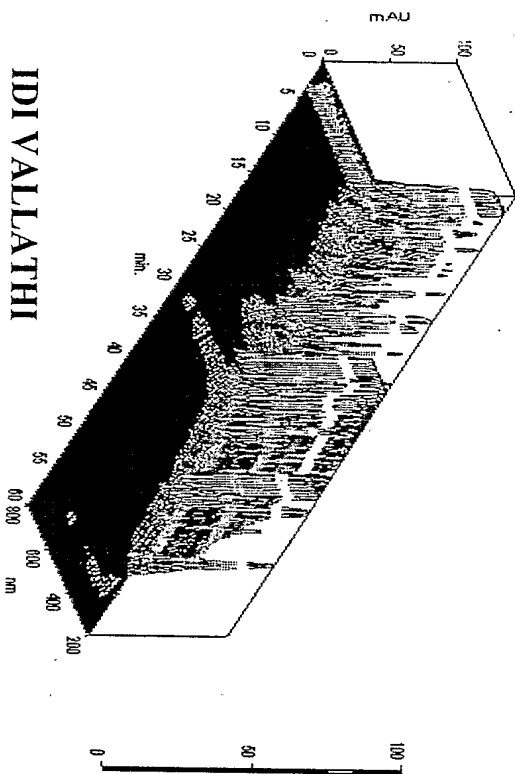


CHANDA MAARUTHA CHENDOORAM

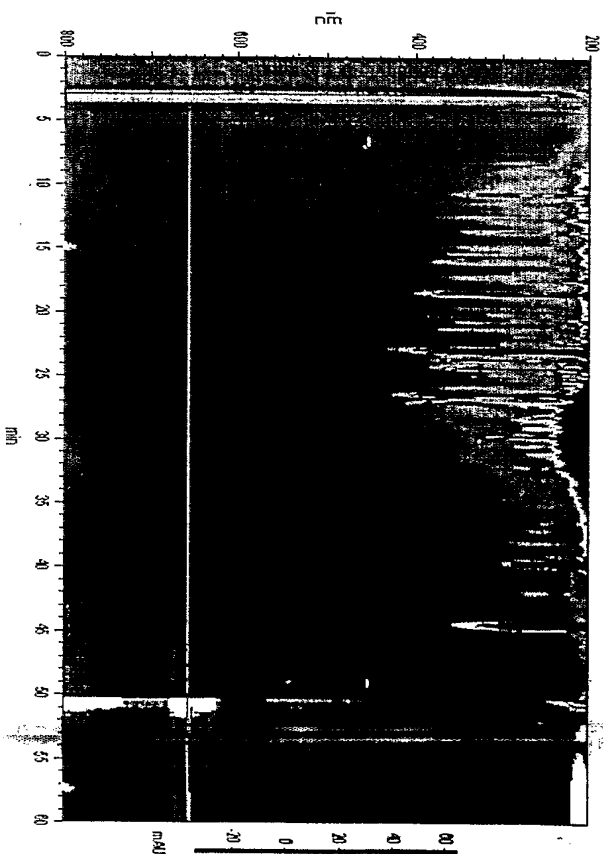
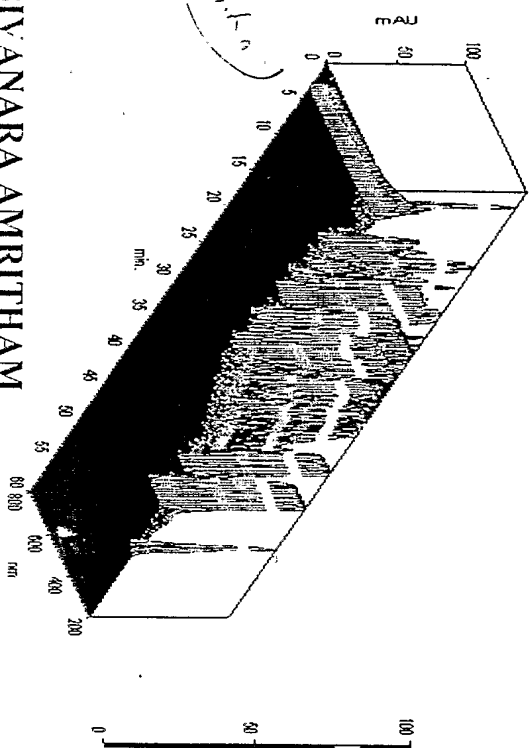
Signature
R. N. P. Simha

SIDDHA MEDICINES (3)

FIG 84



IDI VALLATHI

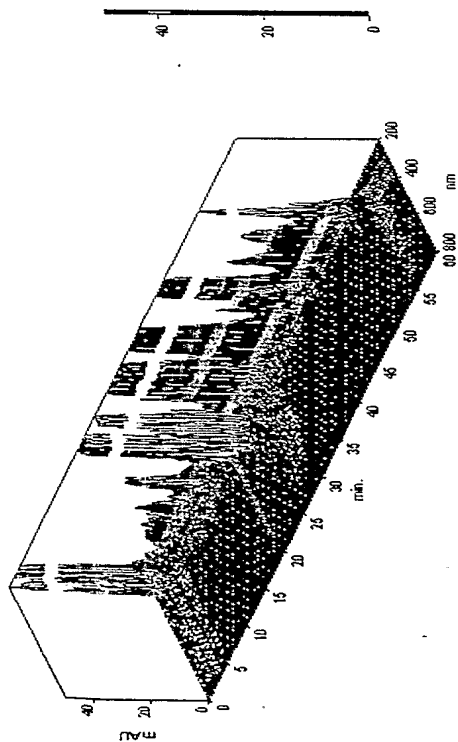
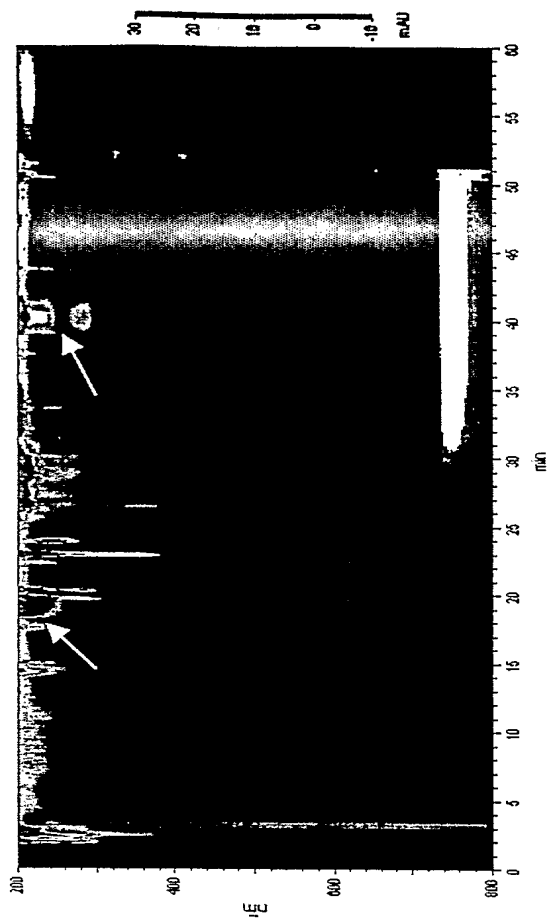


SIVANARA AMRITHAM

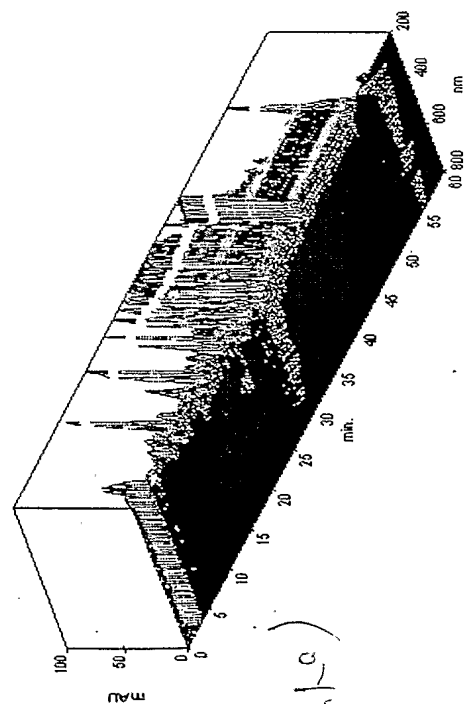
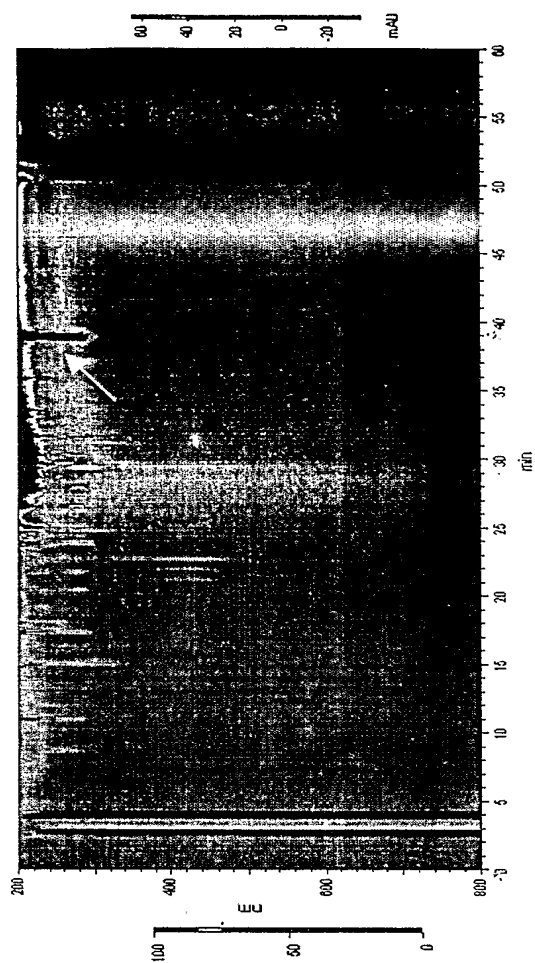
Handwritten signature
R. V. Srinivas

MEDICINES FOR PSYCHOLOGICAL DISORDERS

FIG 85



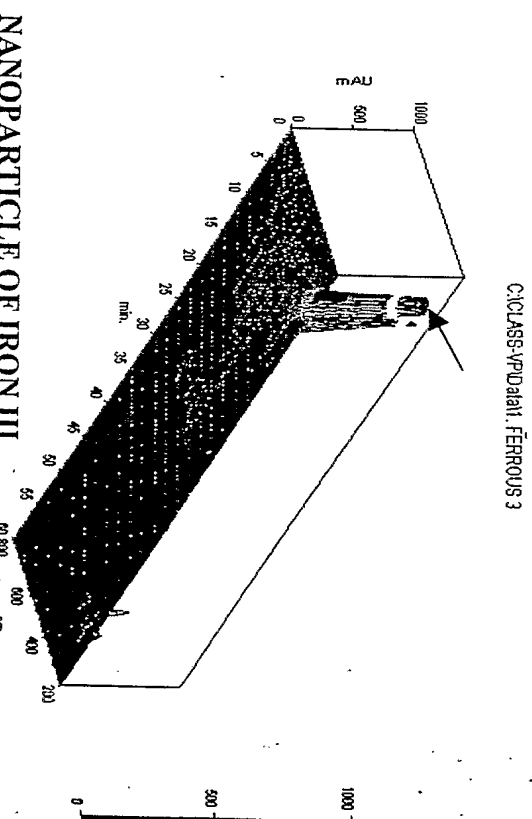
SODIUM VALPROATE (ALLOPATHIC MEDICINE)



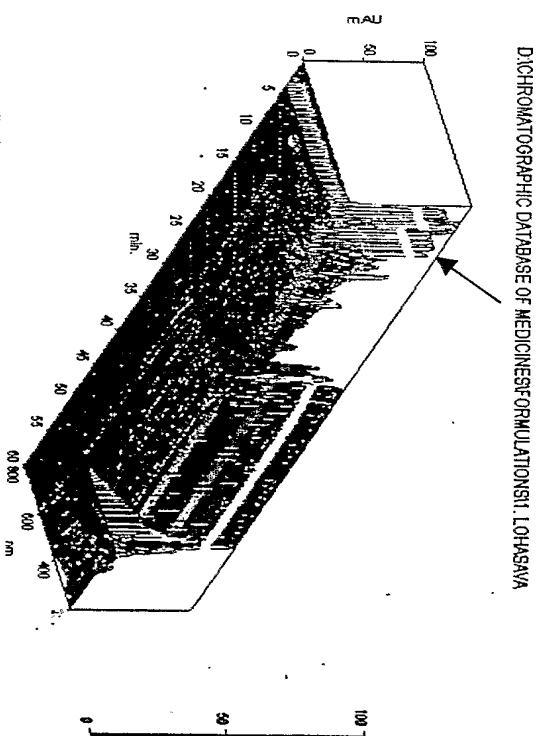
PERANDA PARPAM (SIDDHA MEDICINE)

Offenle
TRNPS (Siddha)

FIG 86



NANOPARTICLE OF IRON III



DICHROMATOGRAPHIC DATABASE OF MEDICINES FORMULATIONS. I. LOHASAVA

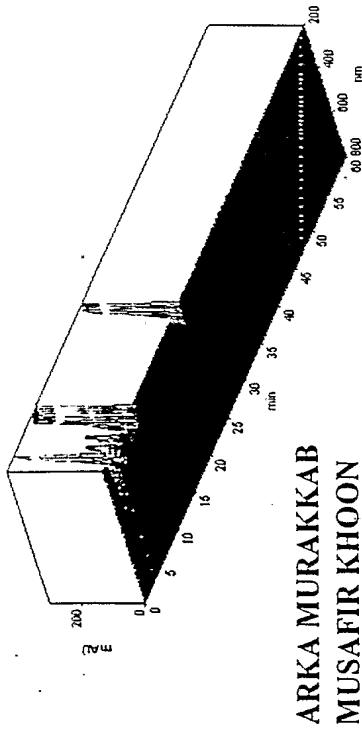
LOHASAVA

A MEDICINE PREPARED USING IRON

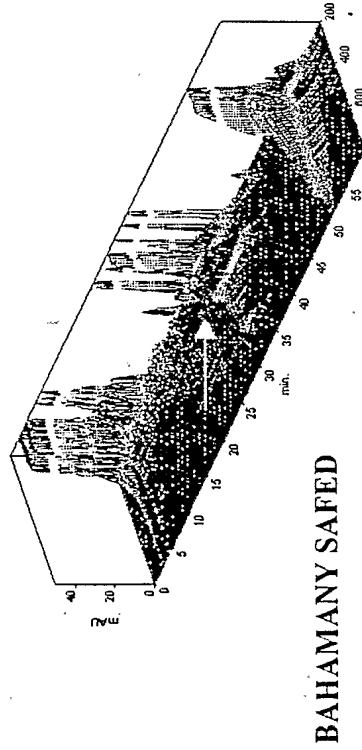
FIG 87

UNANI MEDICINES

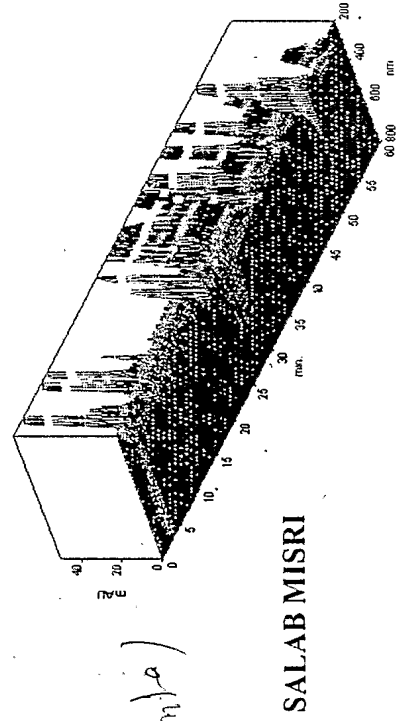
HUNAN11 ARKA MURAKKAB MUSAFIR KHOON



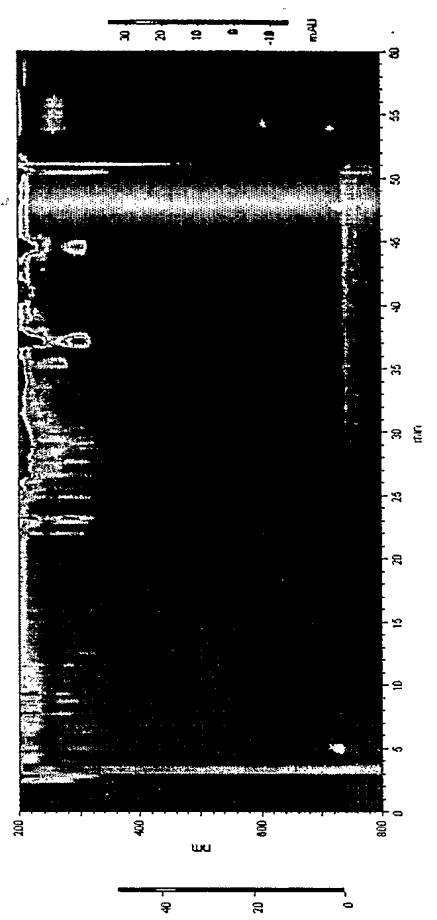
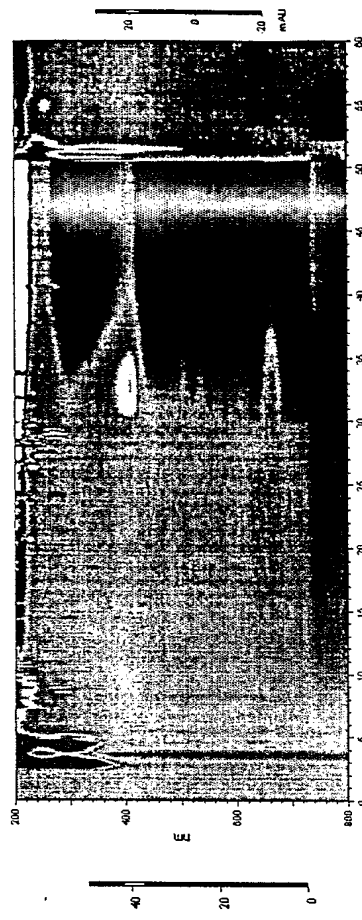
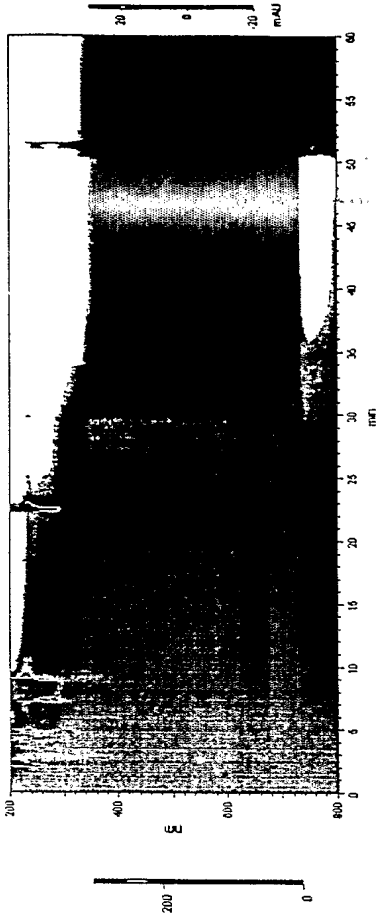
HUNAN11 BAHAMANY SAFED



HUNAN11 SALAB MISRI (ORCHIS LAXIFLORA)

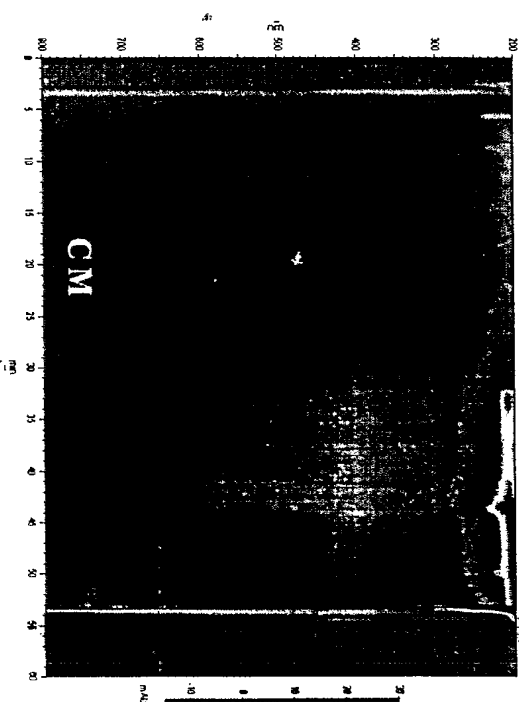
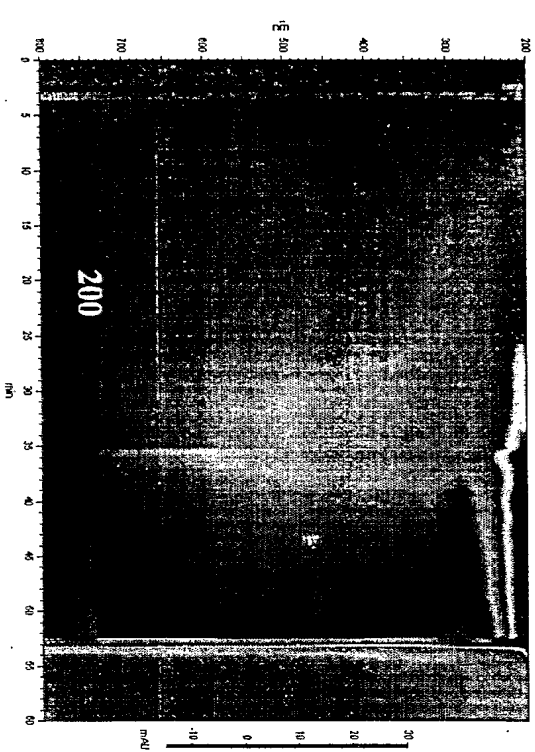
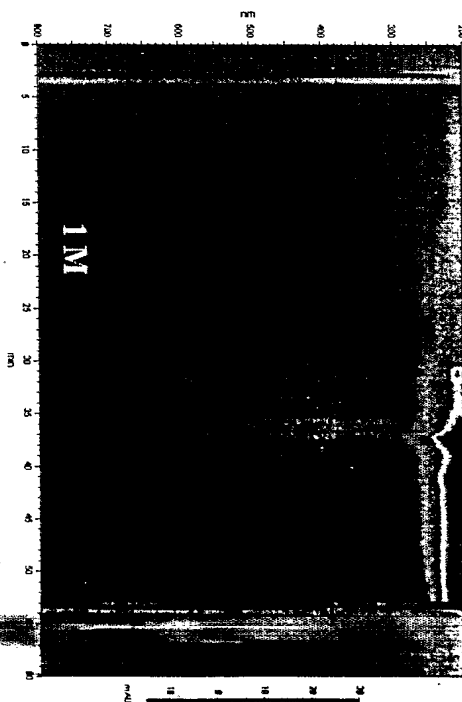
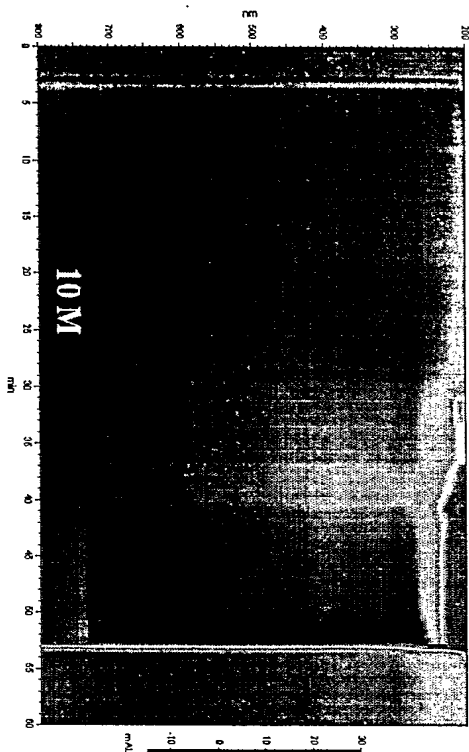


Offinbo
(BNP 8mba)



DIFFERENT DILUTIONS OF ARS ALB HOMEOPATHIC MEDICINE

FIG 88

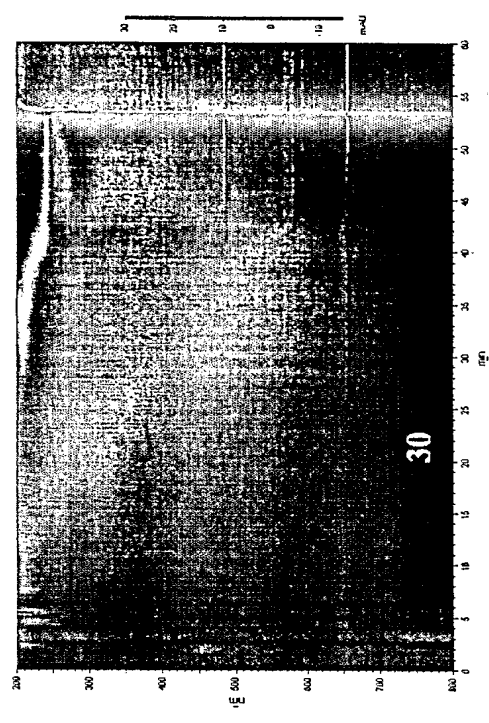
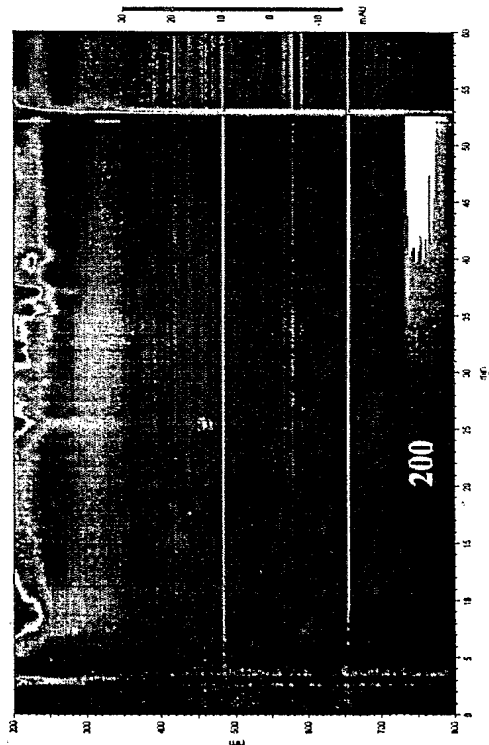
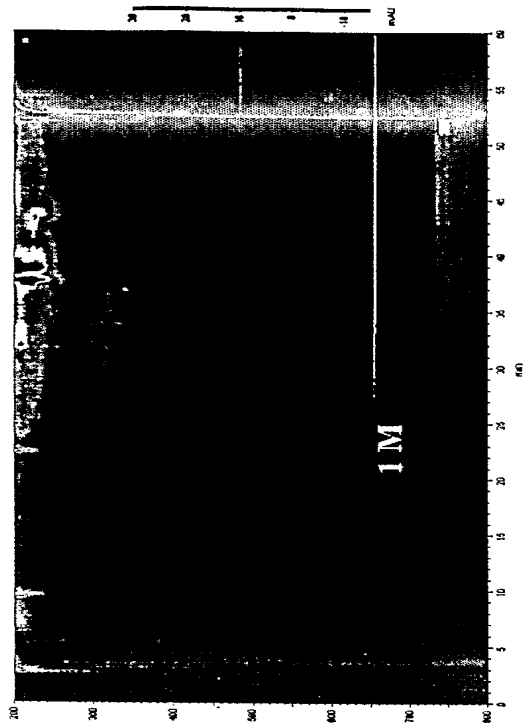
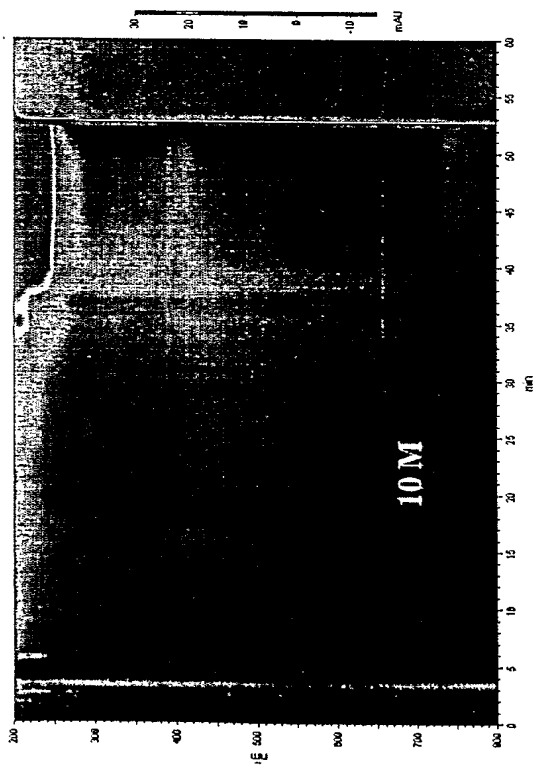


Handwritten signature: D. H. S. (1-1-1)

DIFFERENT DILUTIONS OF BELLADONA

FIG 89

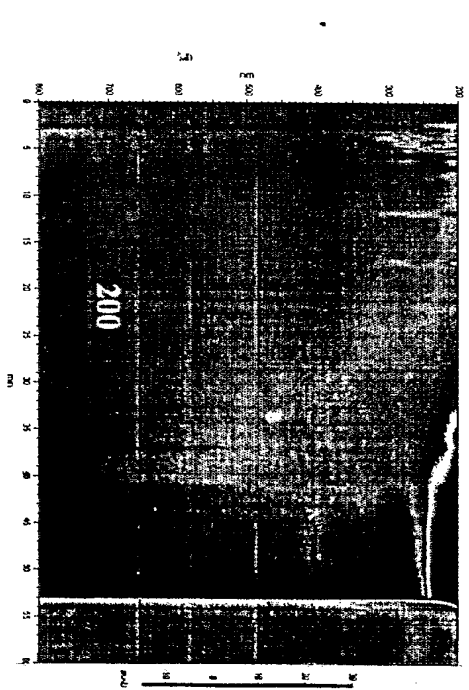
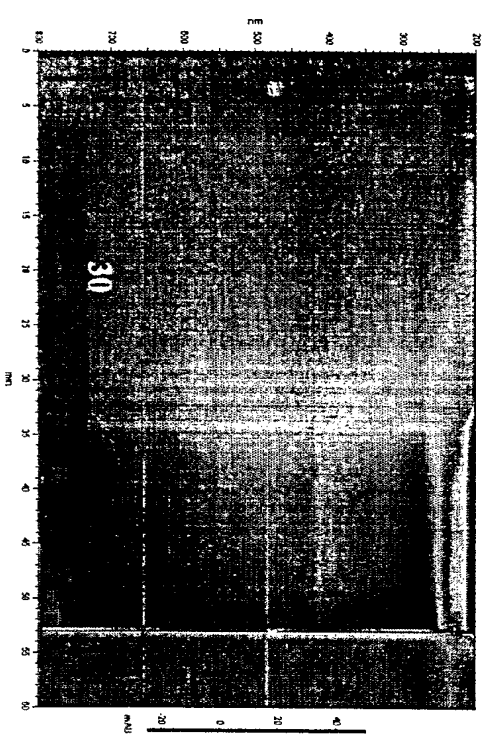
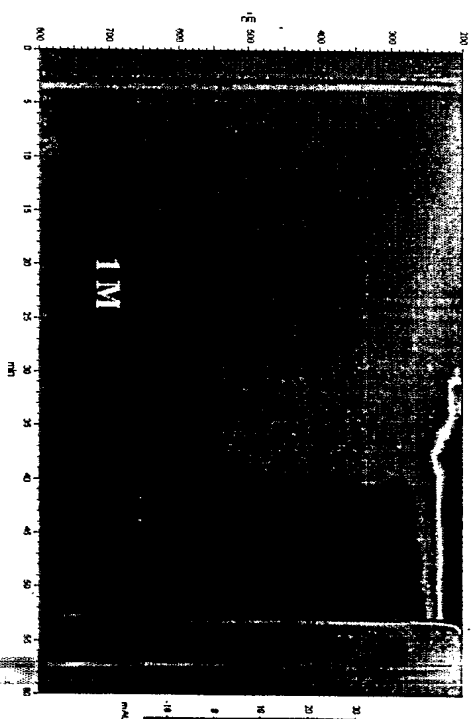
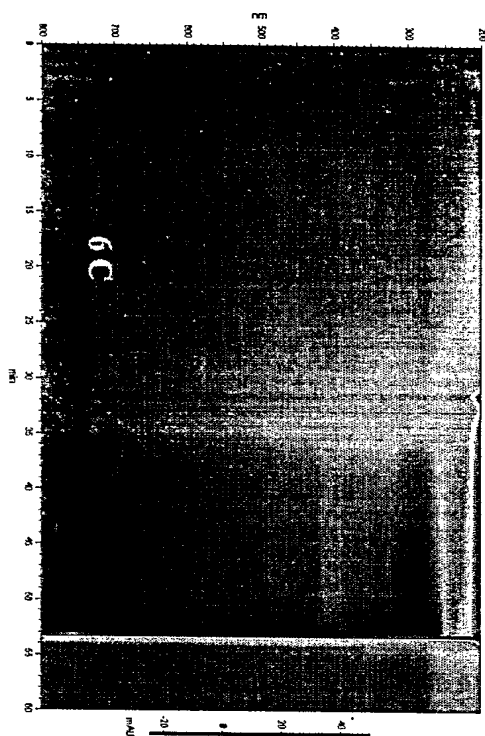
HOMEOPATHIC MEDICINE



Handwritten signature: Dr. [illegible]
Handwritten text: (Belladonna 1M)

DIFFERENT DILUTIONS OF IPECAC HOMEEO MEDICINE

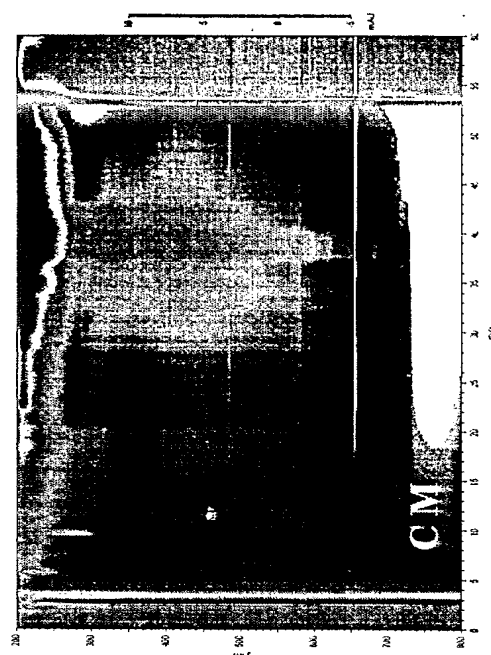
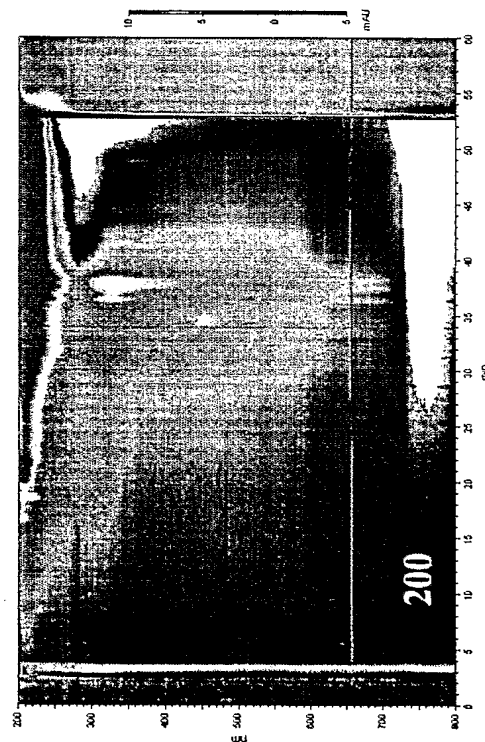
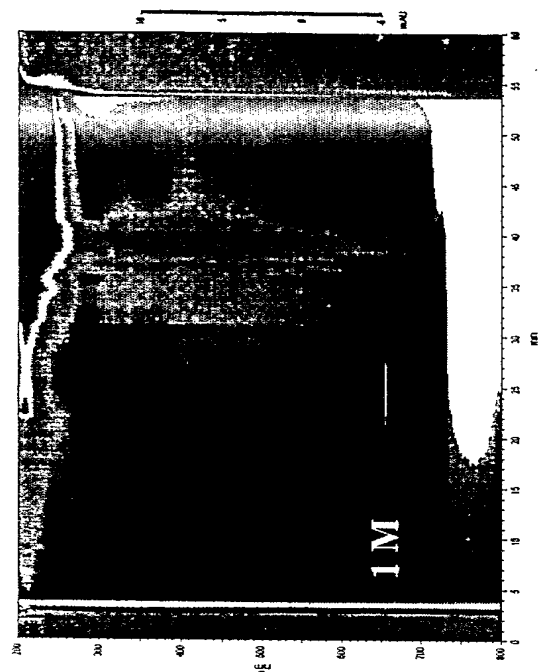
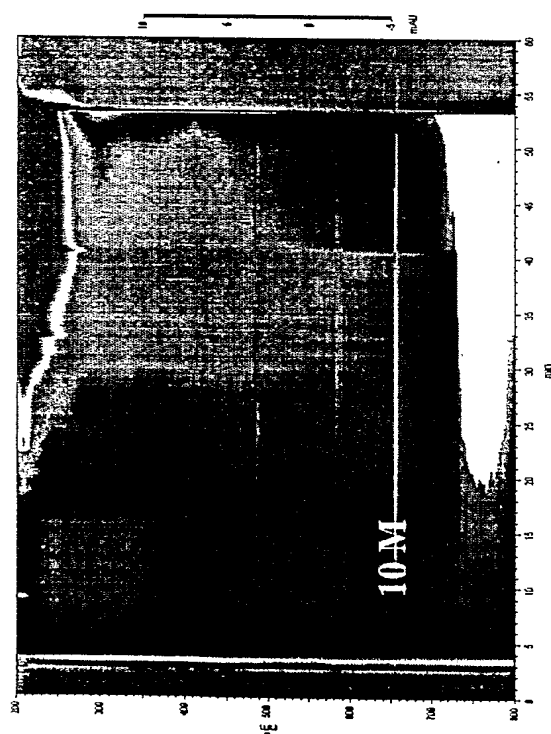
FIG 90



Handwritten signature: Dr. P. S. S. S. S. S.

DIFFERENT DILUTIONS OF NUX VOMICA

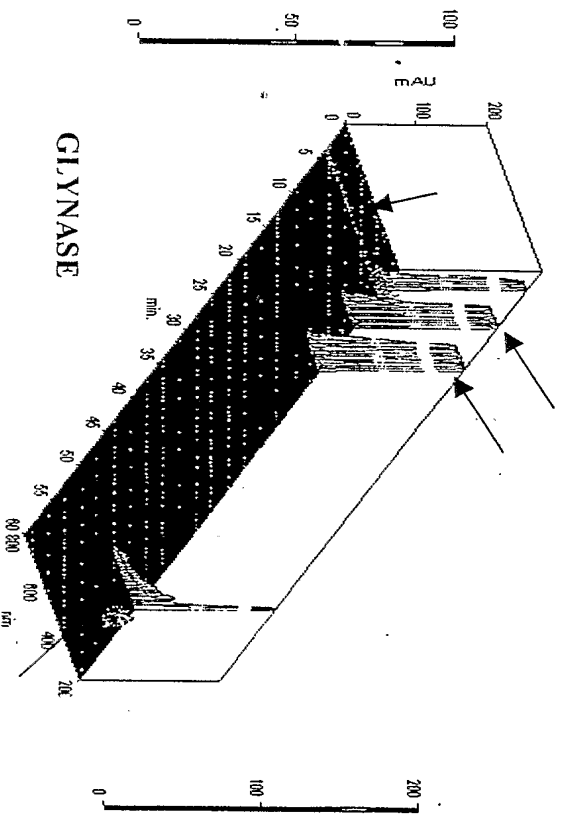
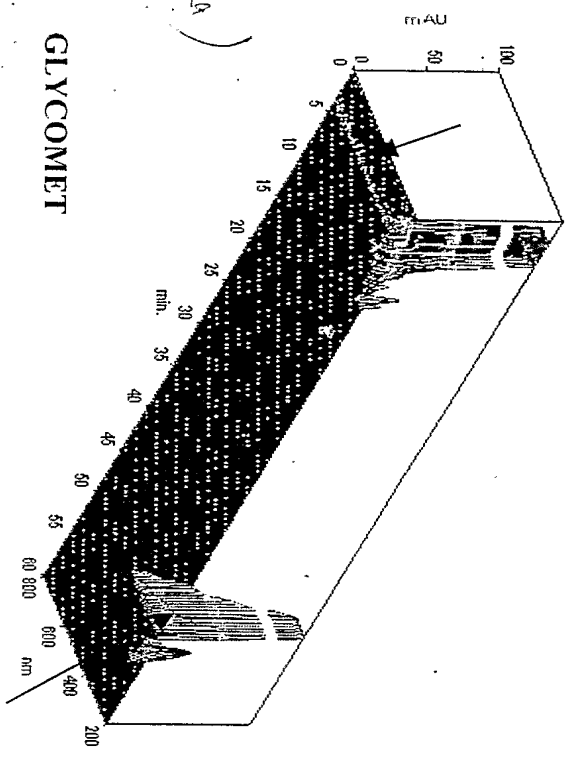
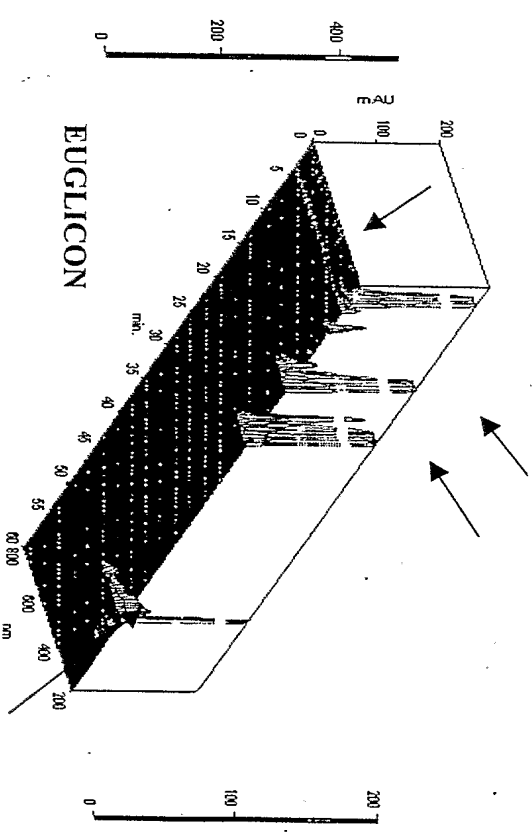
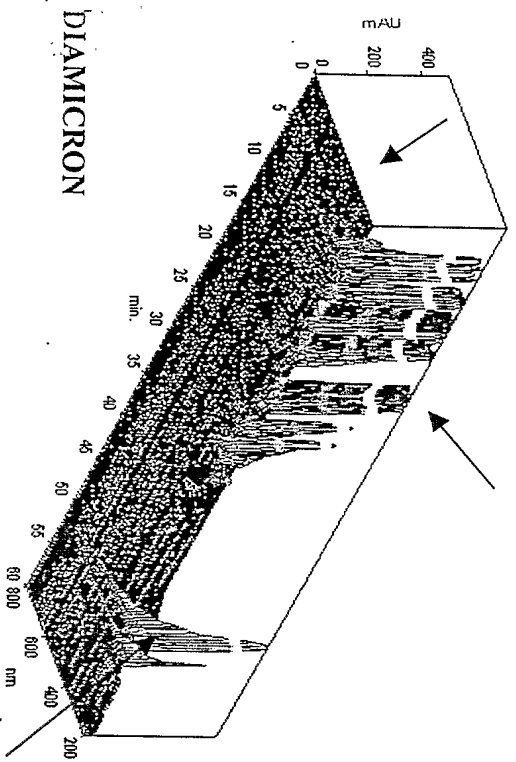
1611



John C. Smith

ALLOPATHIC MEDICINES USED FOR DIABETES (I)

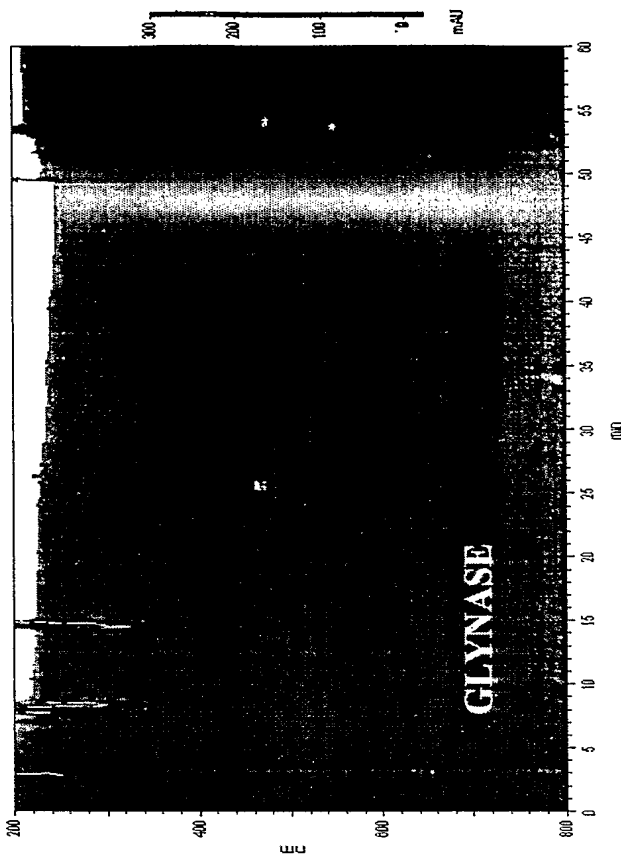
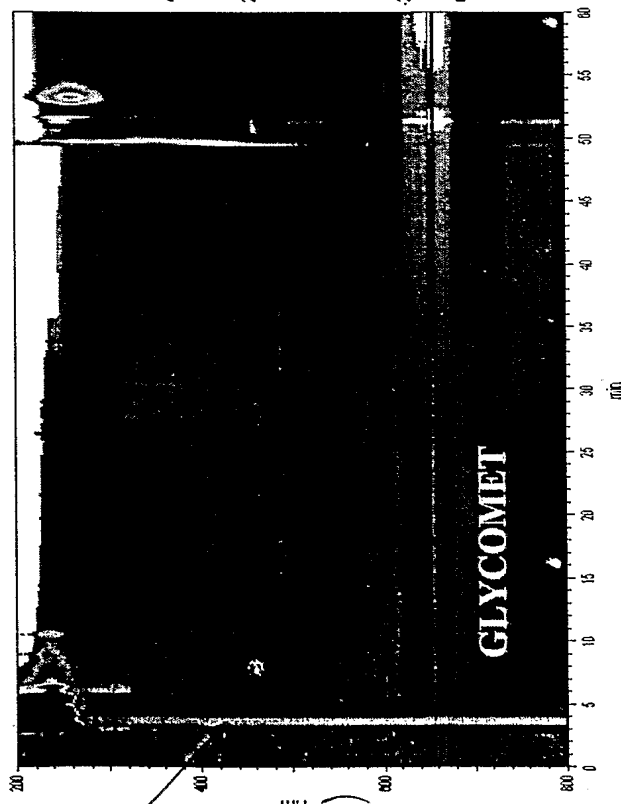
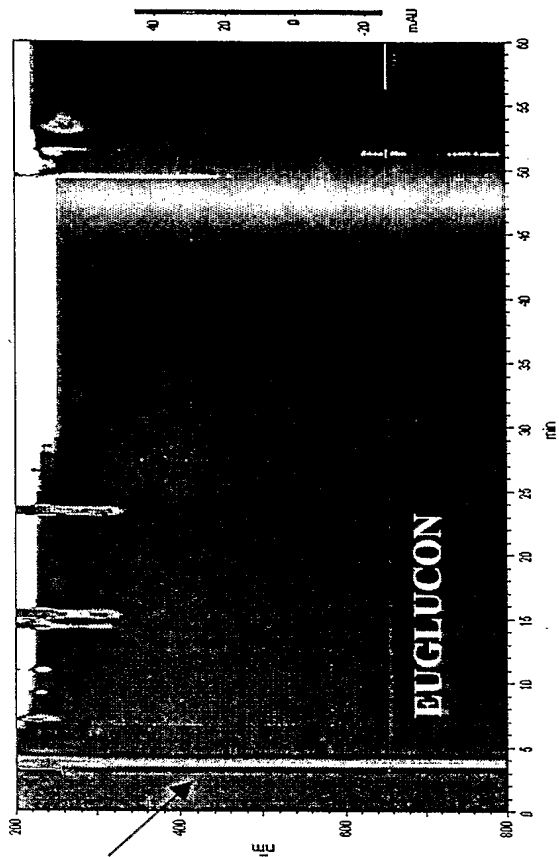
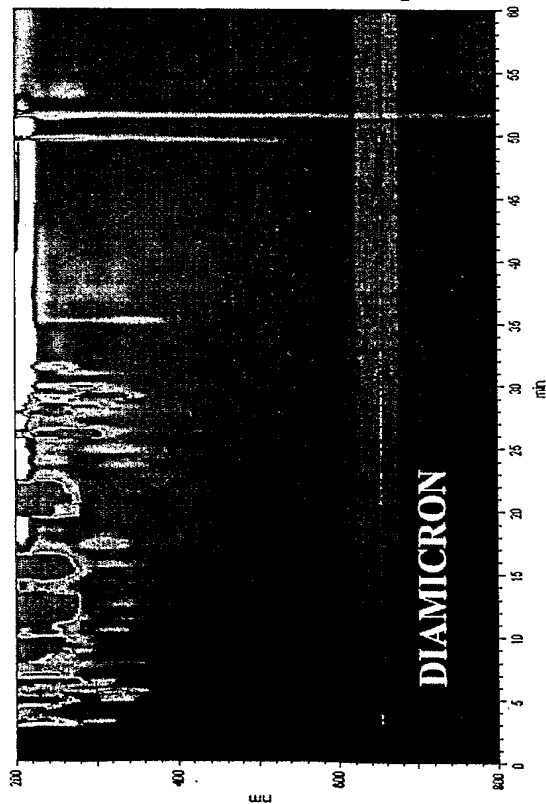
FIG 92



Handwritten signature
RNP Singh

ALLOPATHIC MEDICINES USED FOR DIABETES (1)

FIG 93

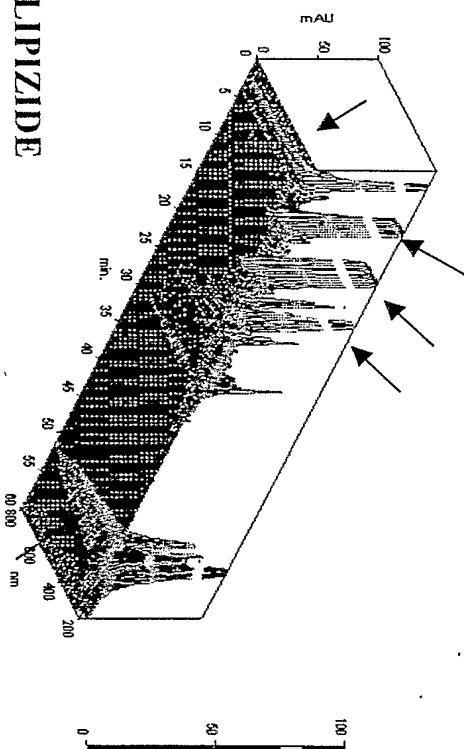


Dr. B. K. Singh
(Pharmacist)

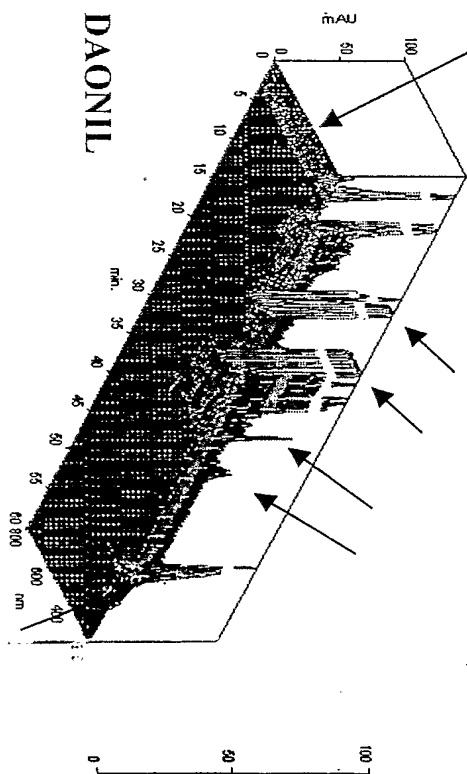
ALLOPATHIC MEDICINES USED FOR DIABETES (2)

FIG 94

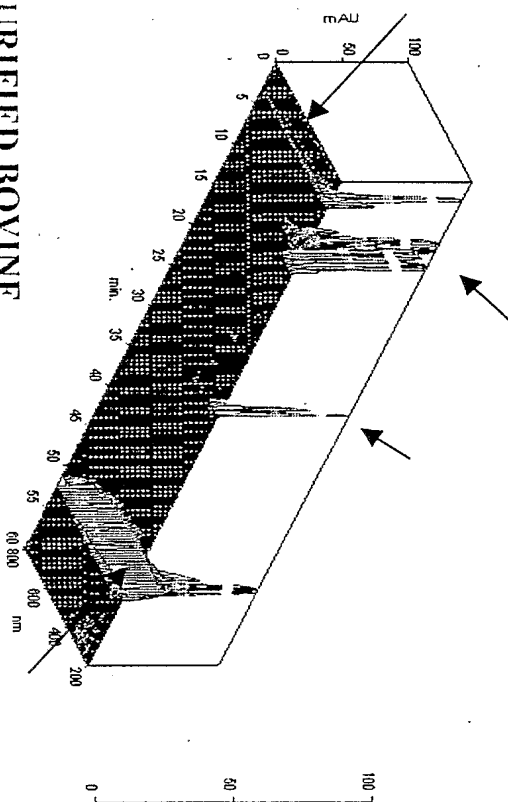
GLIPIZIDE



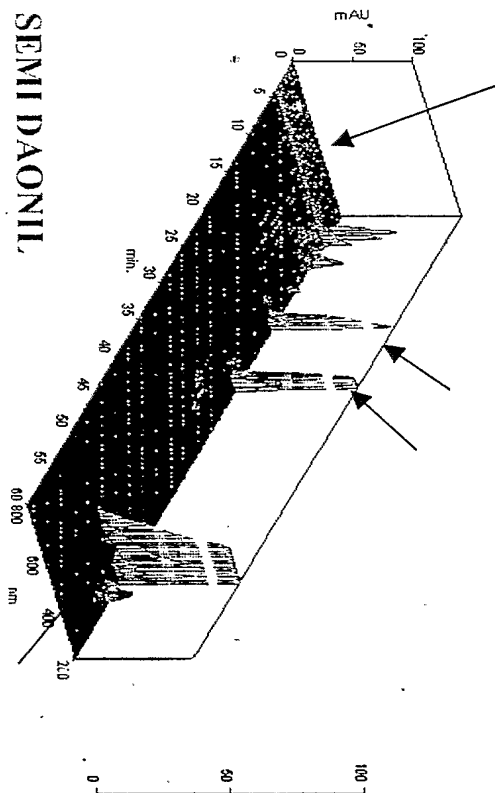
DAONIL



PURIFIED BOVINE



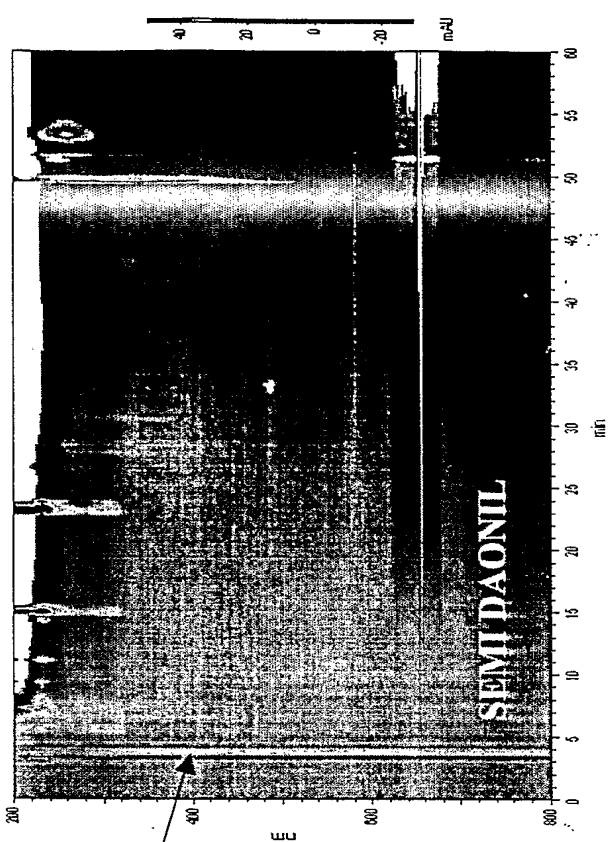
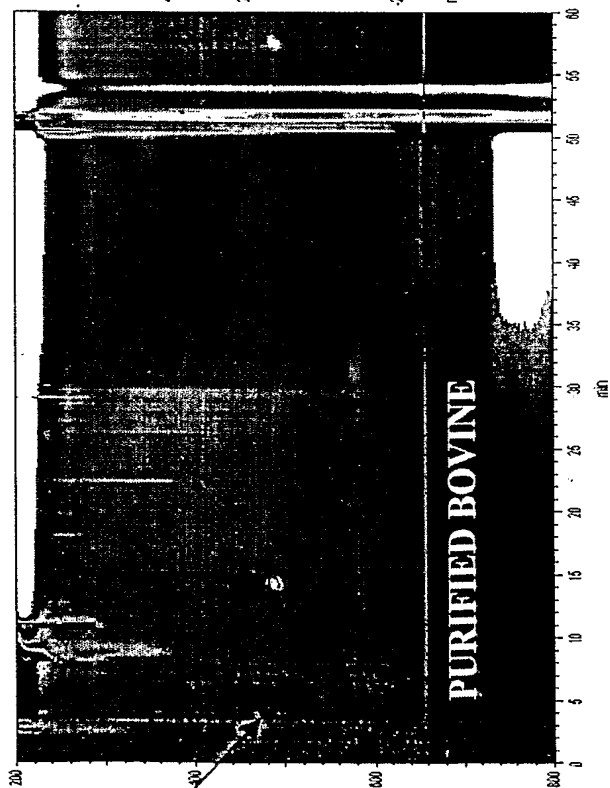
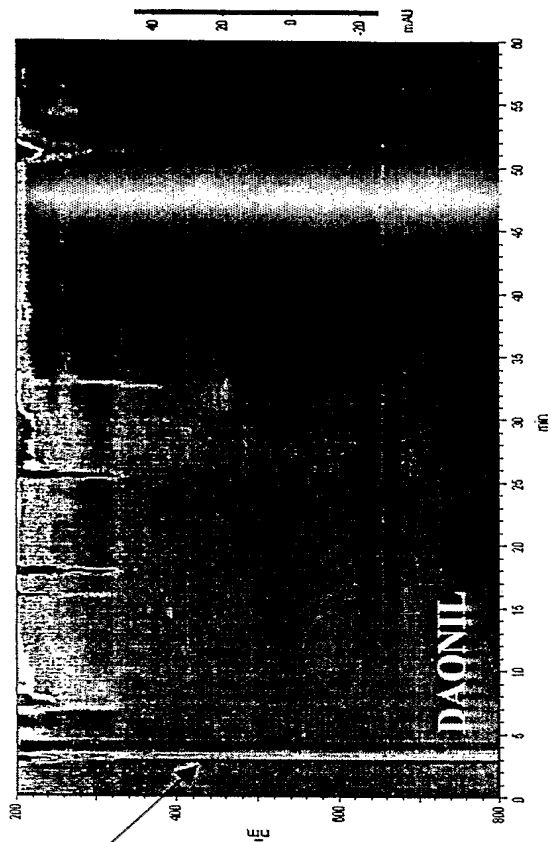
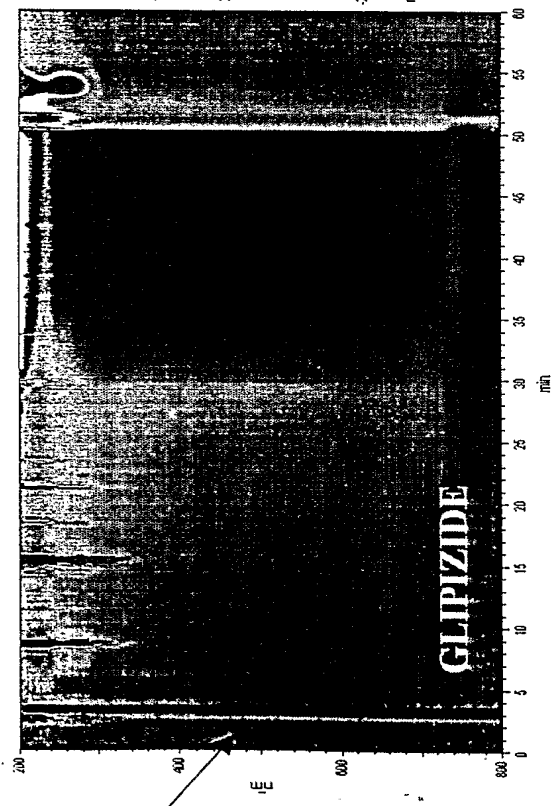
SEMI DAONIL



Handwritten signature: M. S. S. (M. S. S. S. S. S.)

ALLOPATHIC MEDICINES USED FOR DIABETES

FIG 95

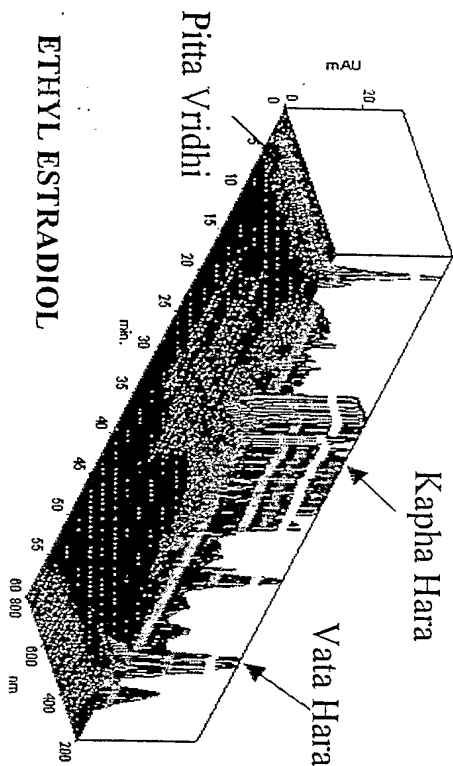


Phile
(2nd Sample)

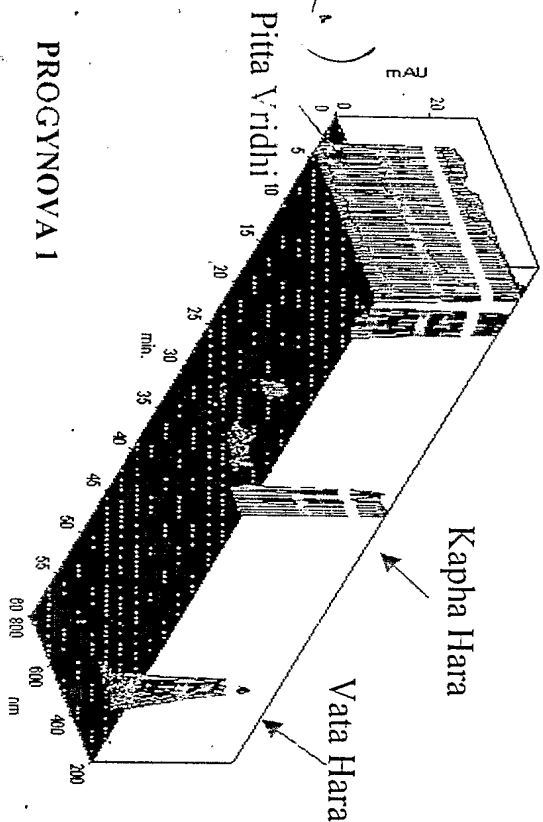
ALLOPATHIC MEDICINES USED FOR MENOPAUSAL DISORDERS AND CONTRACEPTIVES (3)

FIG 96

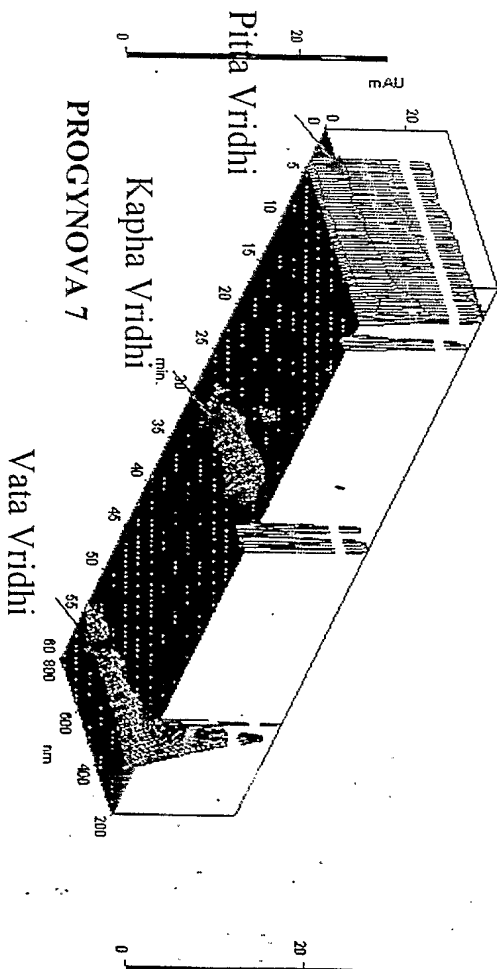
DICHROMATOGRAPHIC DATA MALOWALLOPATHIC1 ETHYL-ESTRADIOL



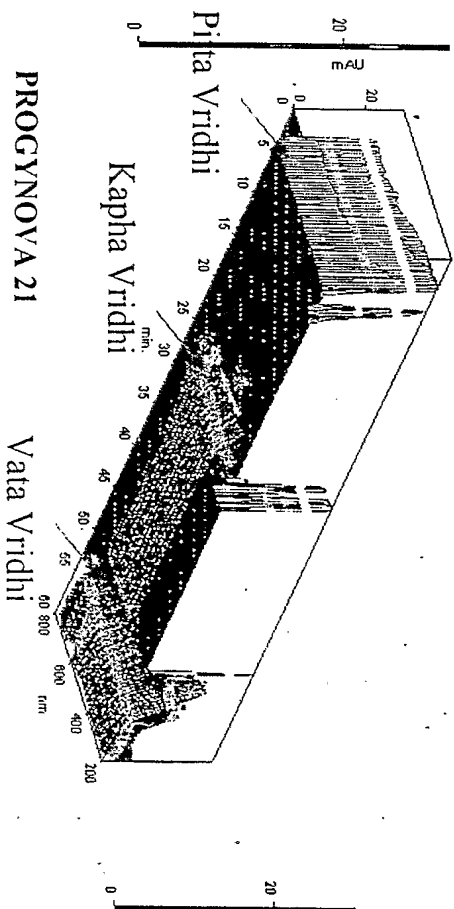
C1CLASS-VP11.PROGYNOVA 1



C1CLASS-VP11.PROGYNOVA 7

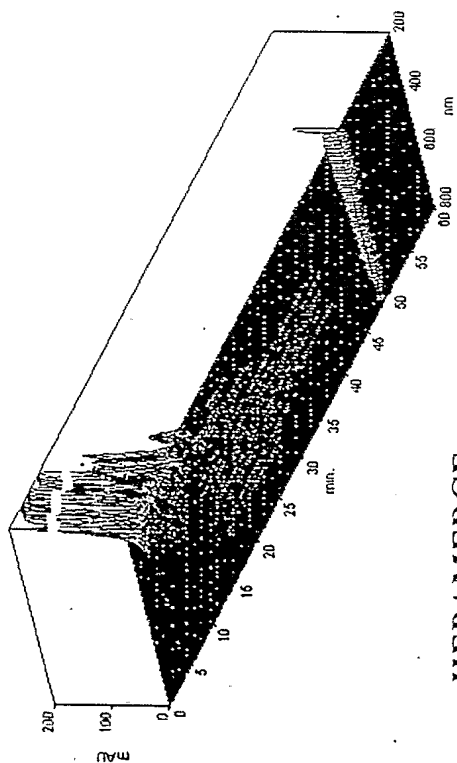


C1CLASS-VP11.PROGYNOVA 21

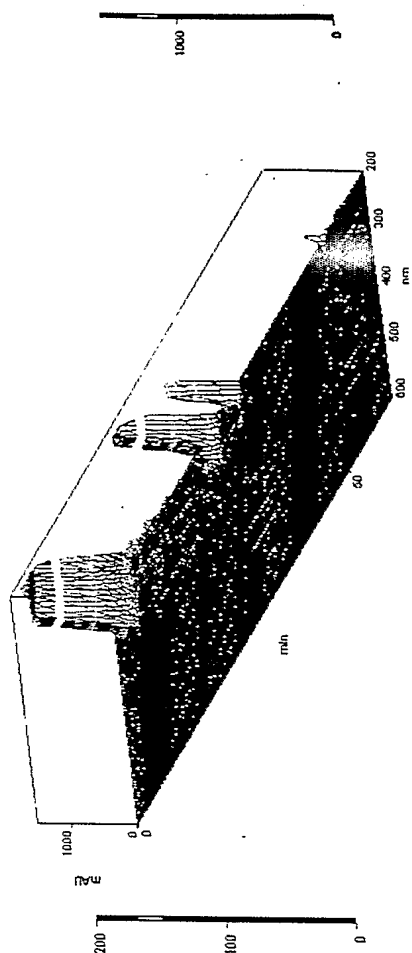


ALLOPATHIC MEDICINES (4)

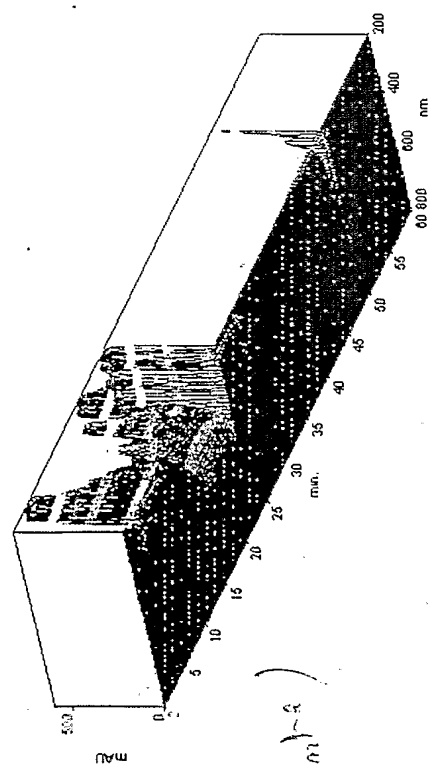
FIG 97



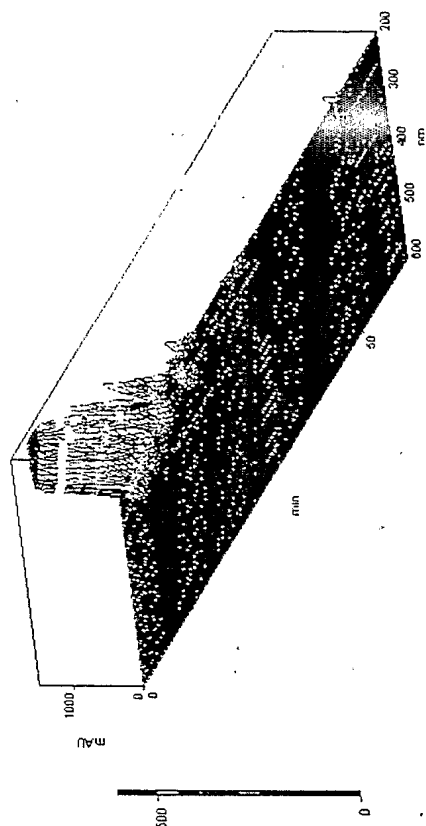
HEPAMERGE



IBUPROFEN+PARACETAMOL



IODINE SUBLIMED (SUL)

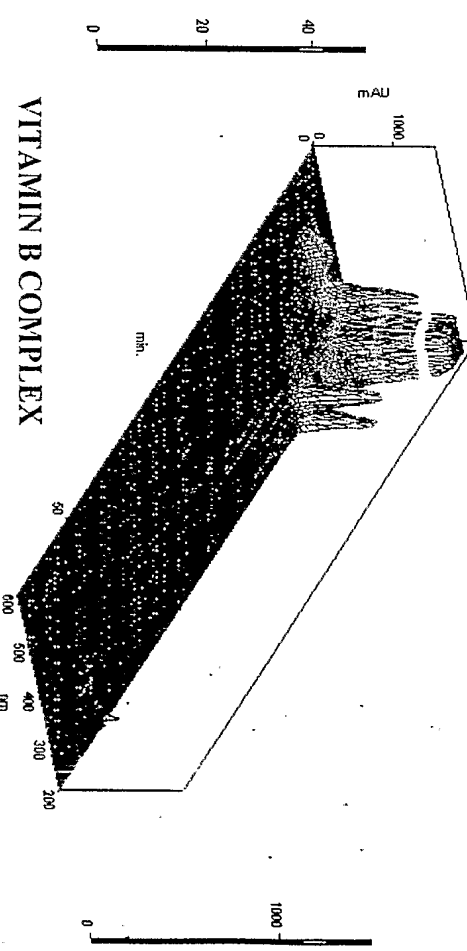
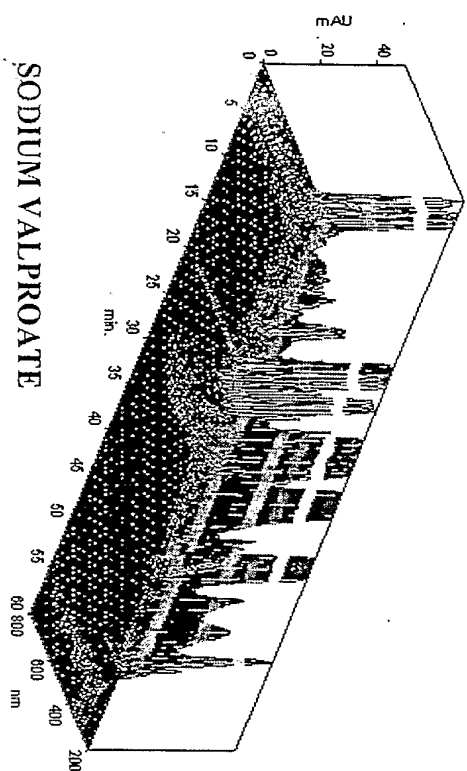


PARACETAMOL

Handwritten signature: D. B. Singh

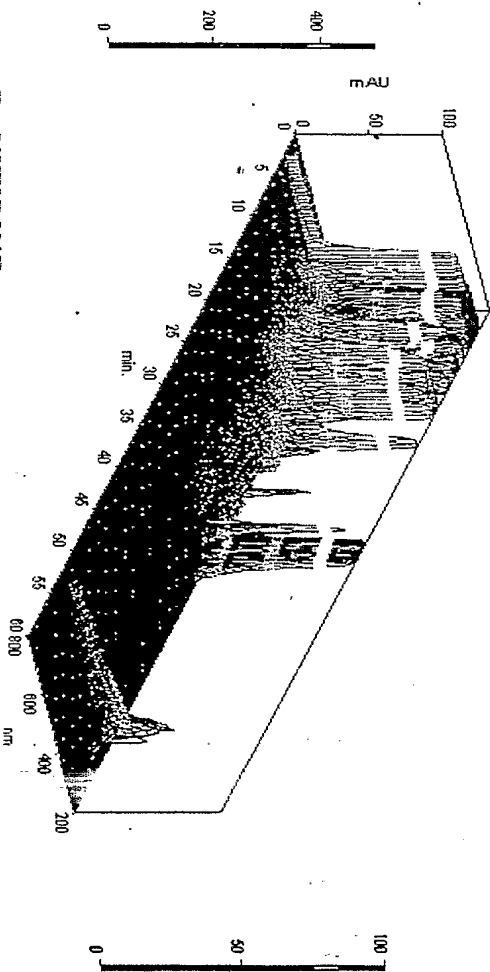
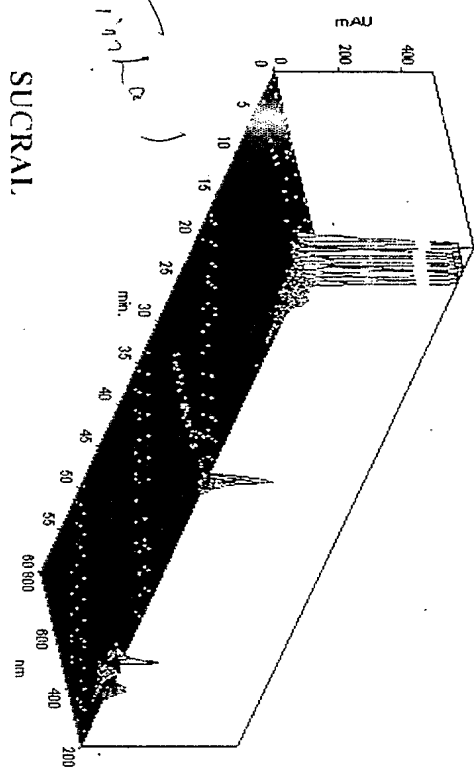
ALLOPATHIC MEDICINES (5)

FIG 98



SODIUM VALPROATE

VITAMIN B COMPLEX

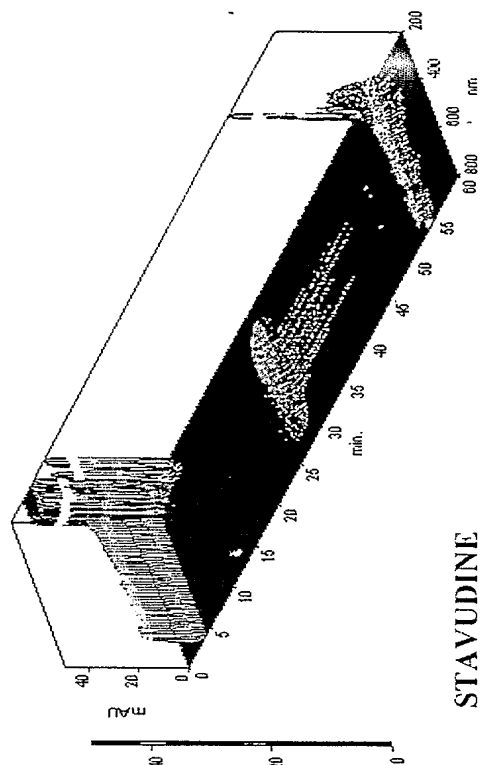
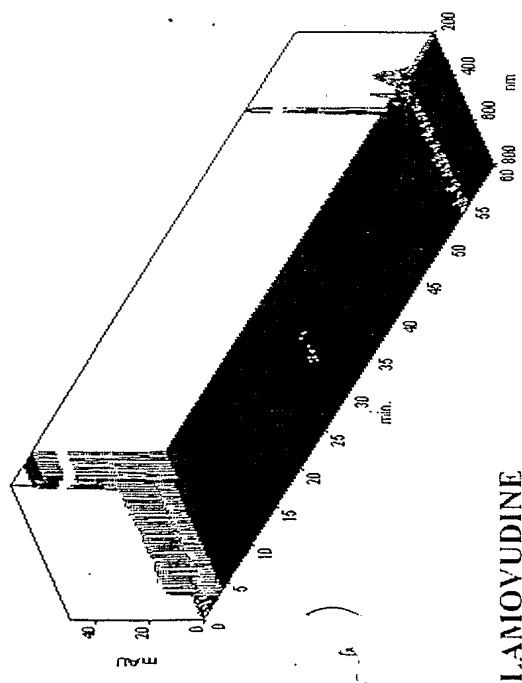
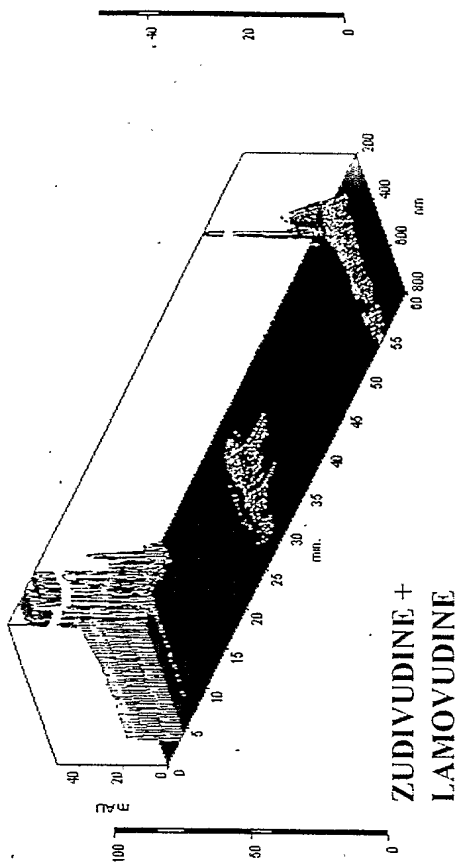
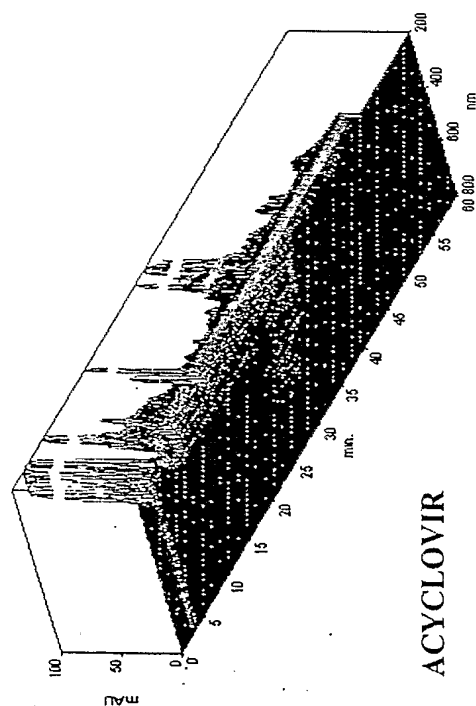


SUCRAL

RANITIDINE

Dr. P. S. Singh
P. S. Singh

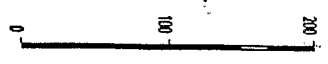
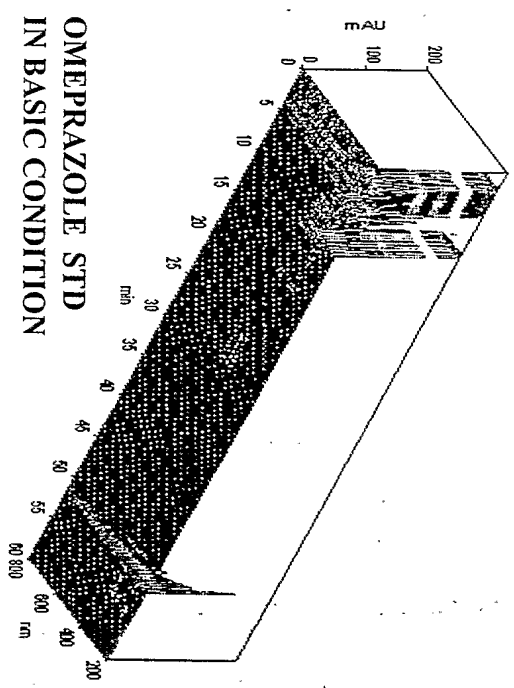
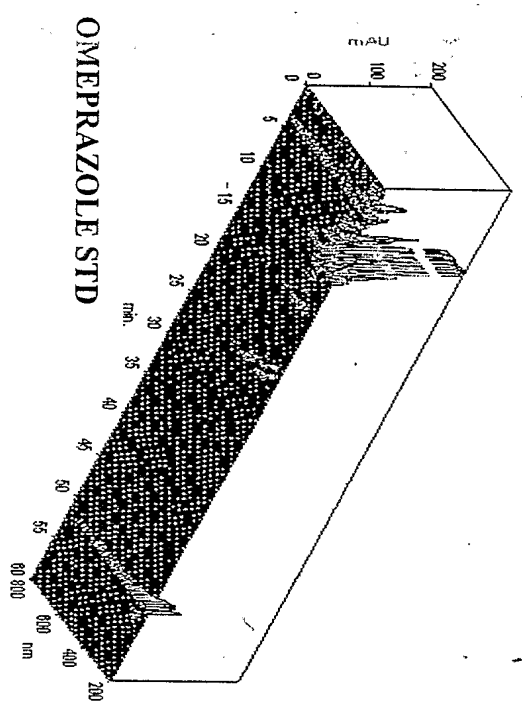
ALLOPATHIC MEDICINES USED FOR HIV TREATMENT (6)



Dr. [Signature]
[Signature]

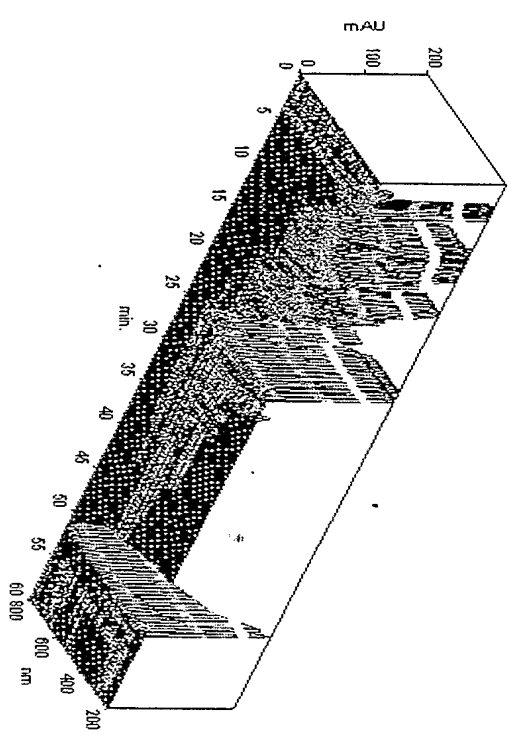
FINGERPRINTS OF ALLOPATHIC MEDICINES (7)

FIG 100



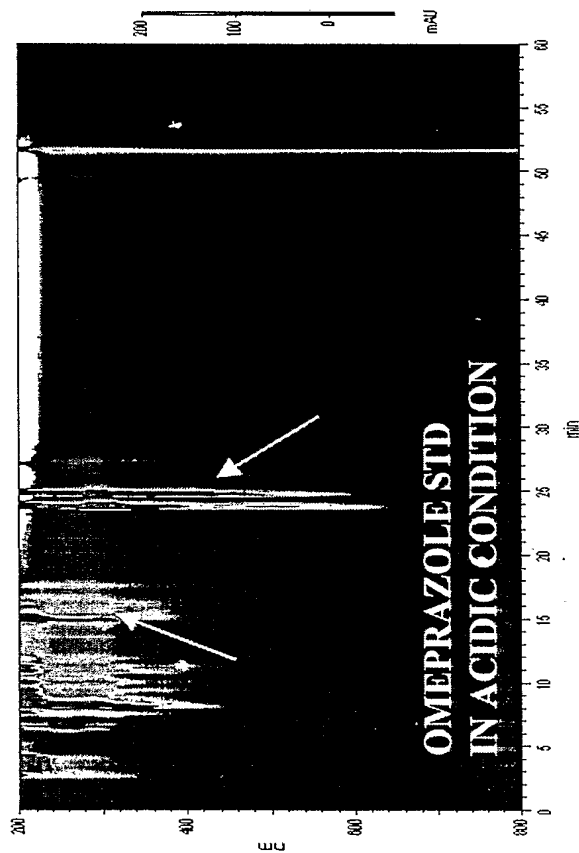
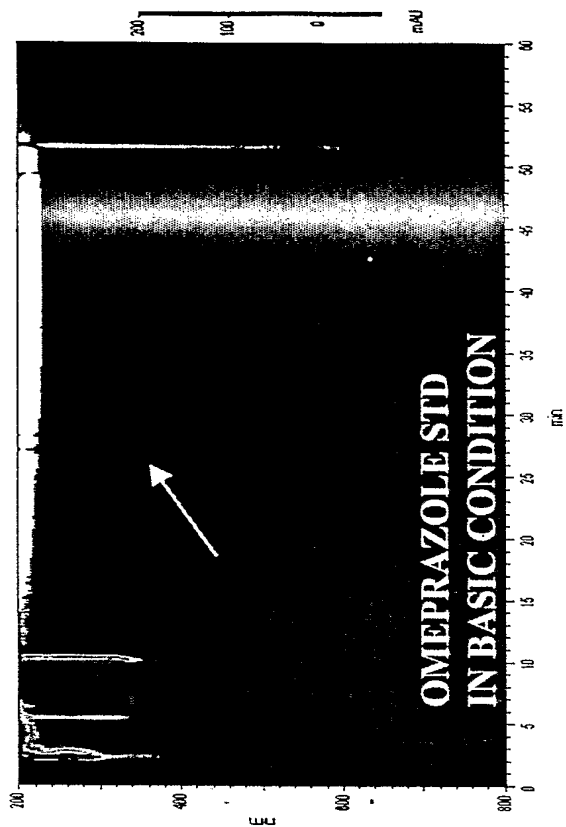
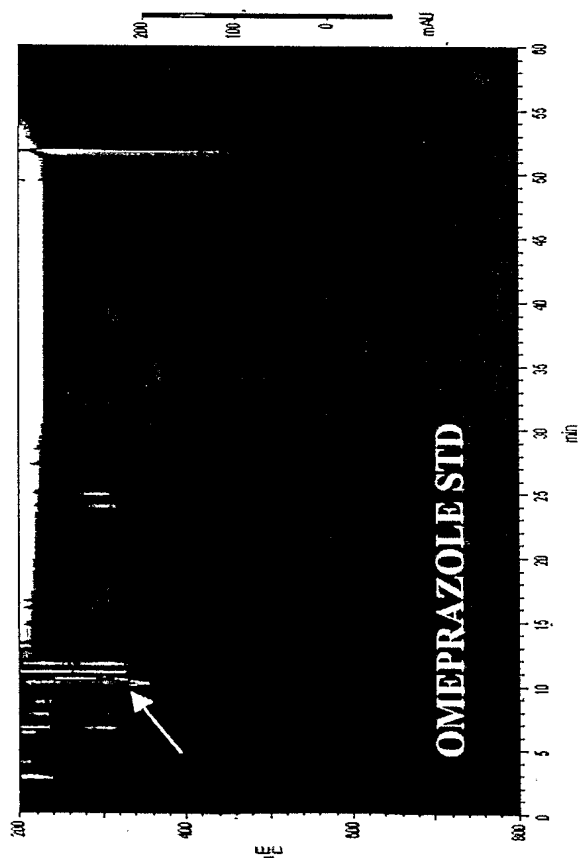
(Dr. R. S. Singh)

OMEPRAZOLE STD
IN ACIDIC CONDITION



FINGERPRINTS OF ALLOPATHIC MEDICINES (8)

FIG 101

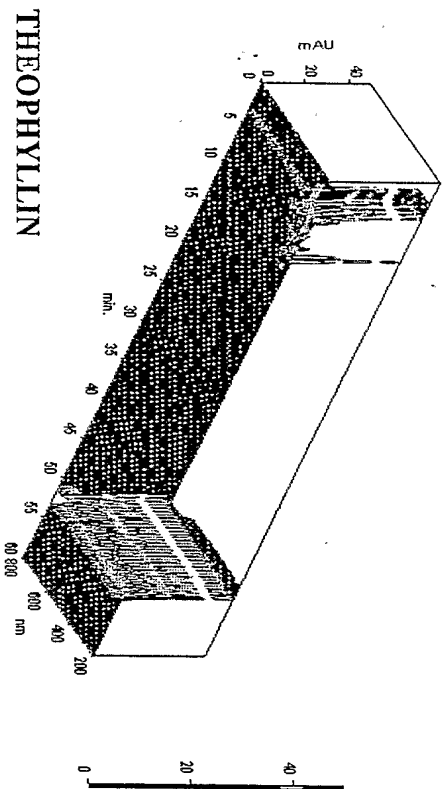


~~Girls~~ (2nd Simla)

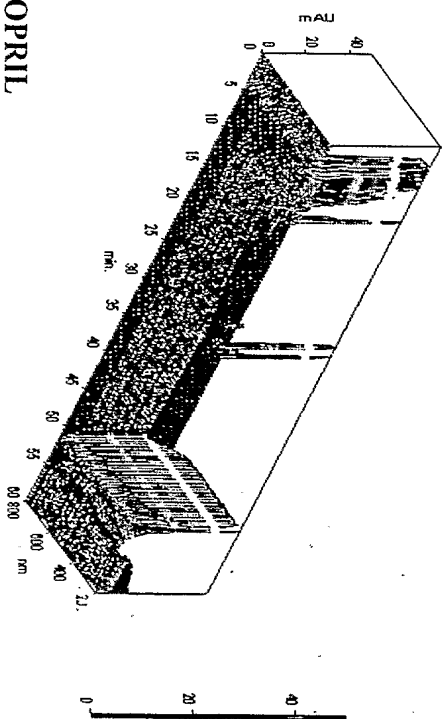
FINGERPRINTS OF ALLOPATHIC MEDICINES (9)

FIG 102.

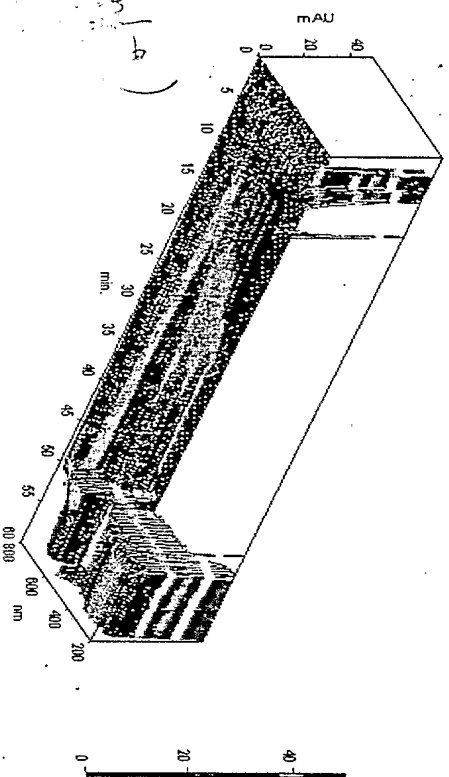
HALLOPATHIC: THEOPHYLLIN



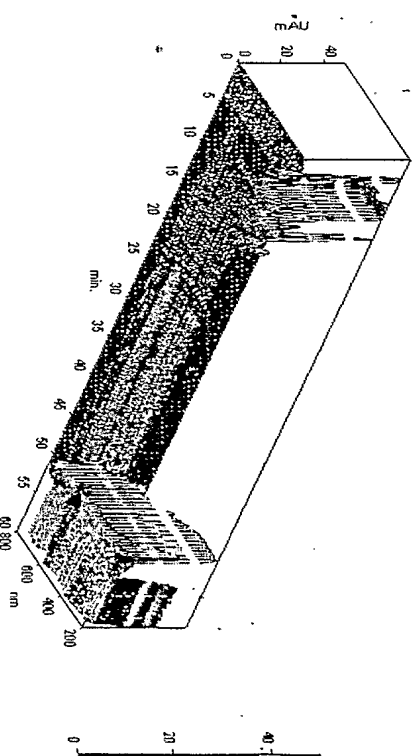
LISINOPRIL



C:CLASS-VPI1 PSEUDO EPHIDRIN



HALLOPATHIC: TINIDAZOLE



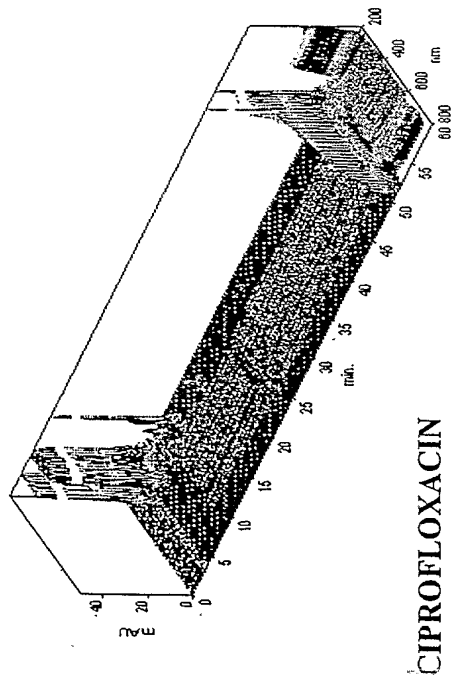
PSEUDO EPHIDRIN

TINIDAZOLE

Handwritten signature: Dr. N. S. M. (a)

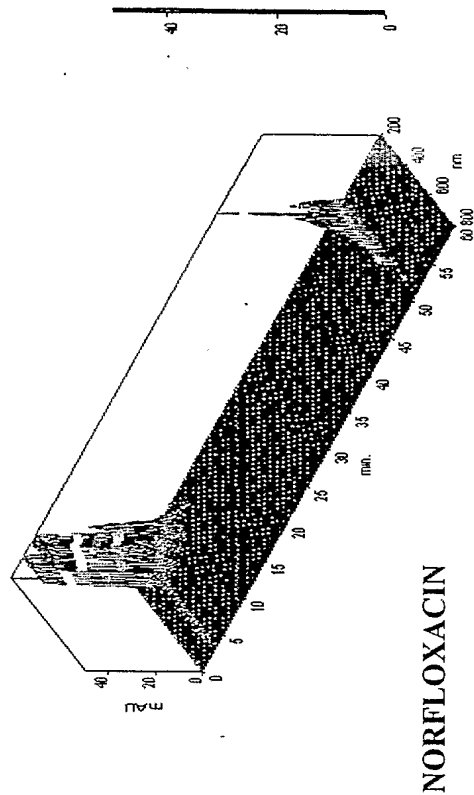
FINGERPRINTS OF ALLOPATHIC MEDICINES (10)

H:VALLOPATHIC1.CIPROFLOXACIN



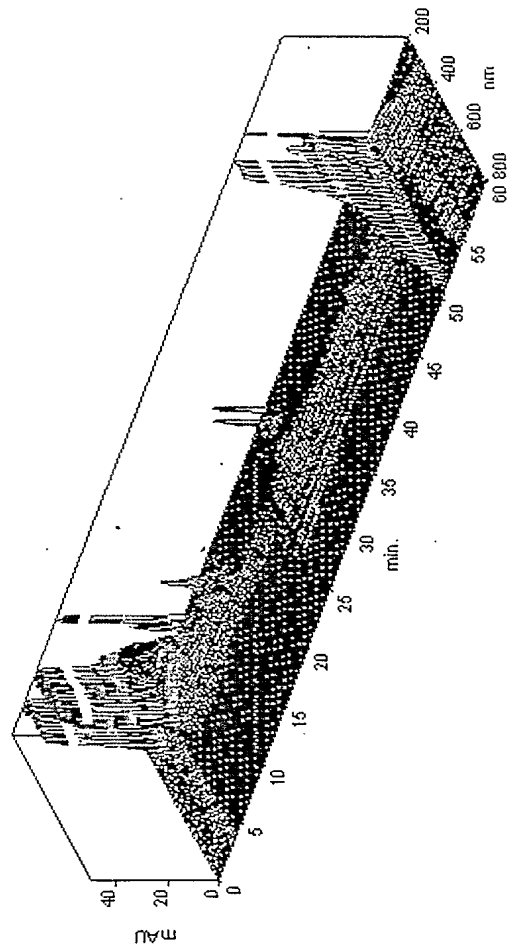
CIPROFLOXACIN

H:VALLOPATHIC1.NORFLOXACIN



NORFLOXACIN

H:VALLOPATHIC1.O FLOXACIN

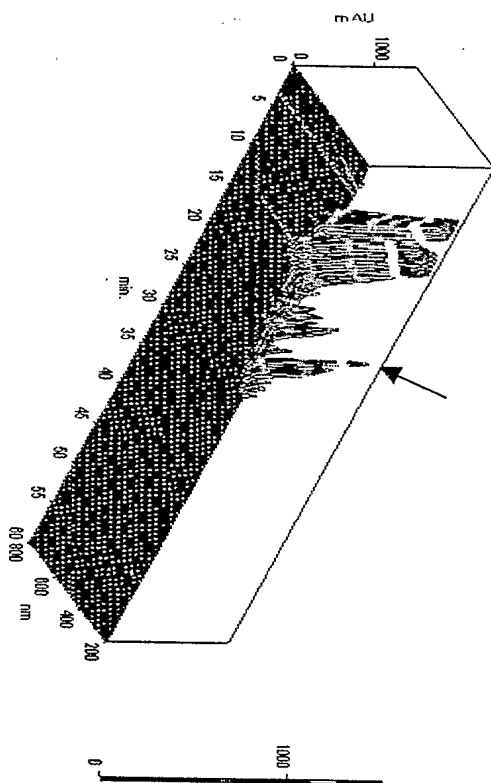


O FLOXACIN

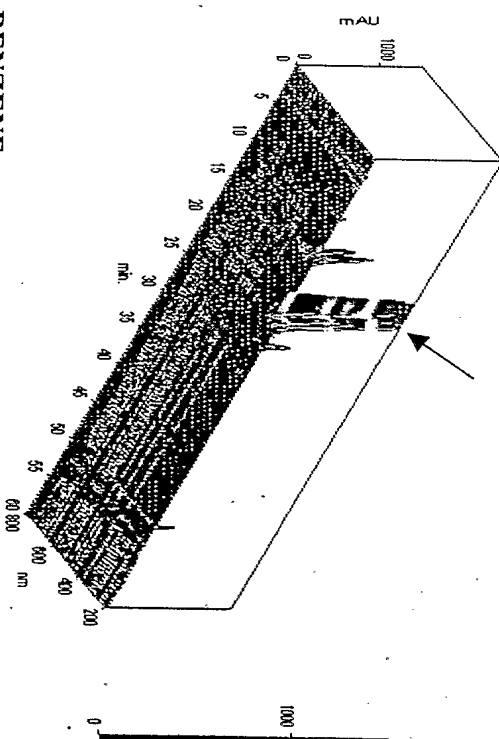
Agile
(RVP 5/1/15)

FINGERPRINTS OF TOXIC SAMPLES

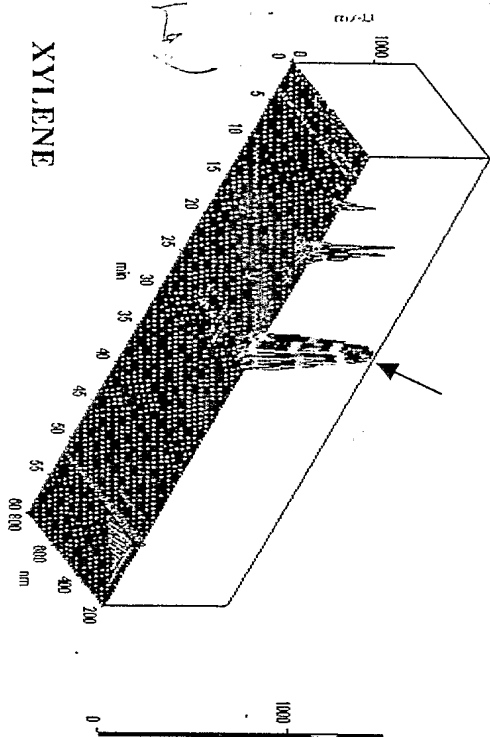
FIG 104



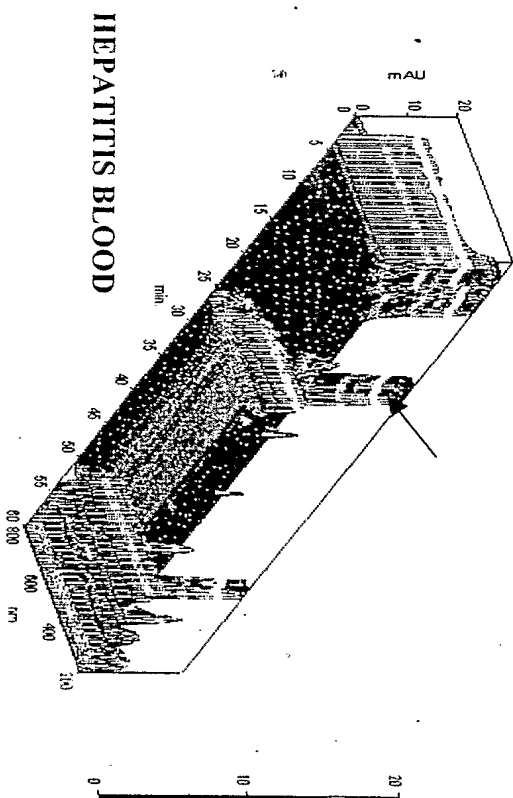
BENZALDEHYDE



BENZENE



XYLENE

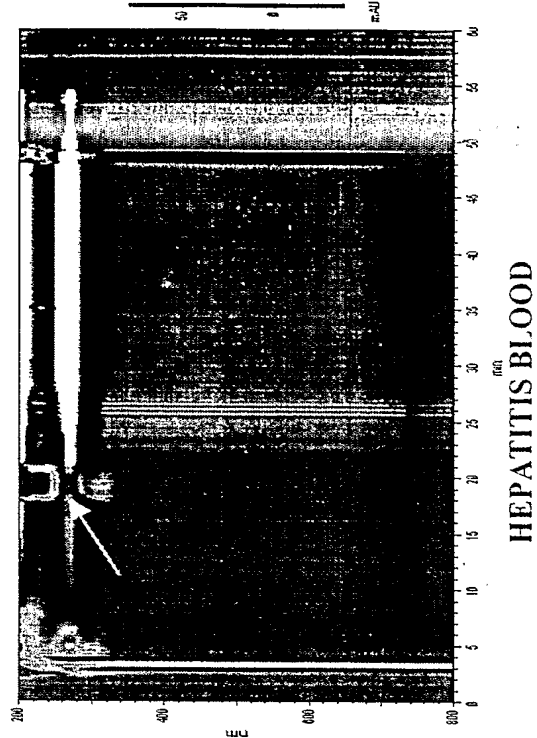
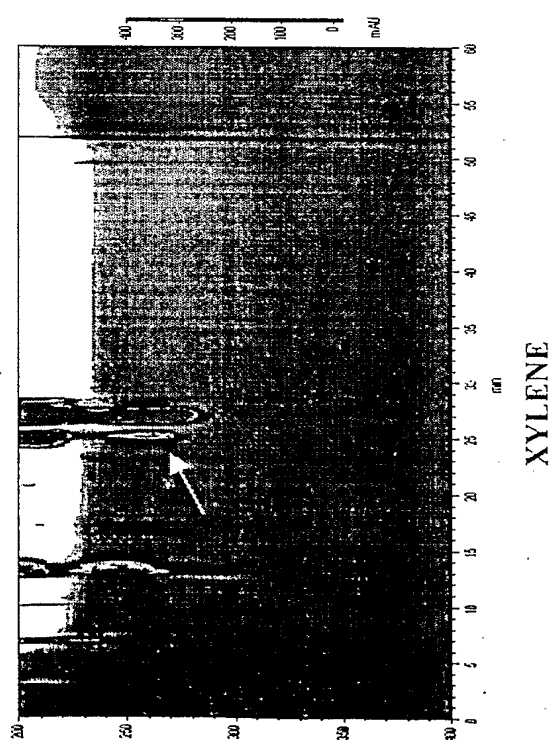
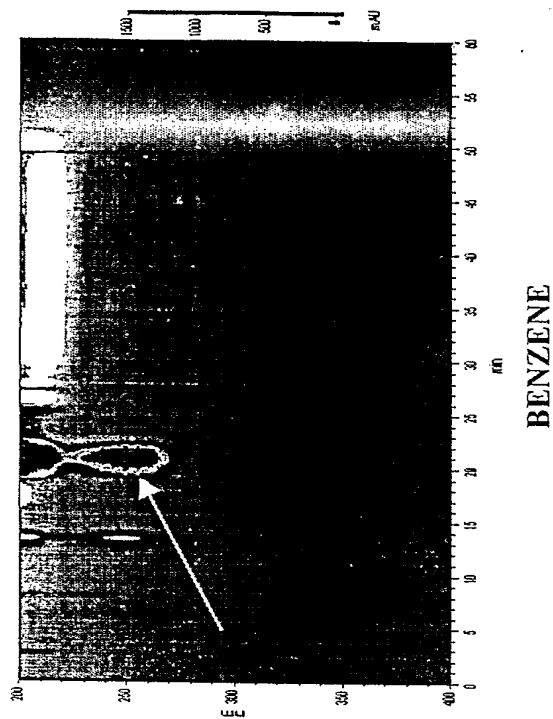
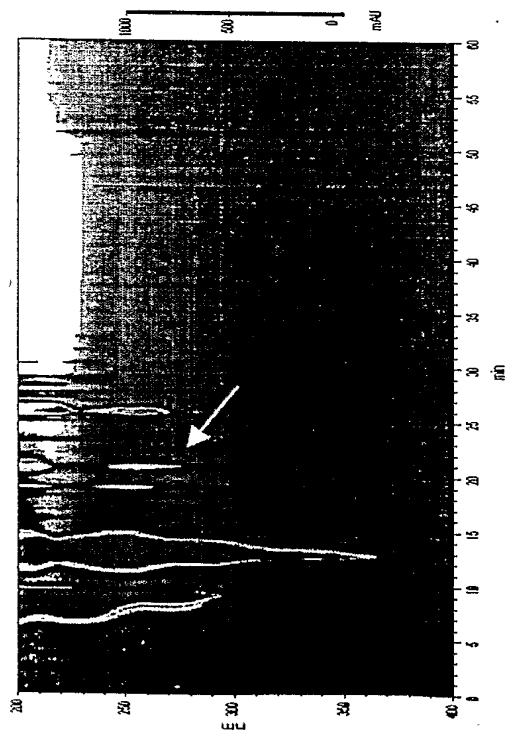


HEPATITIS BLOOD

Dr. J. S. Smith
(KNS:mh)

FINGERPRINTS OF TOXIC SAMPLES (HEPATIC)

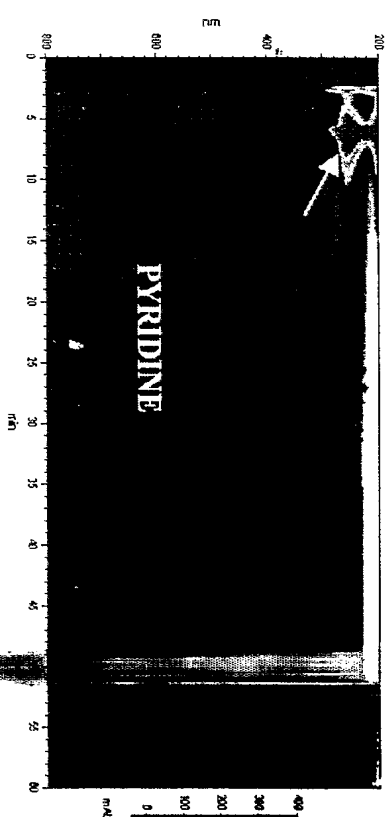
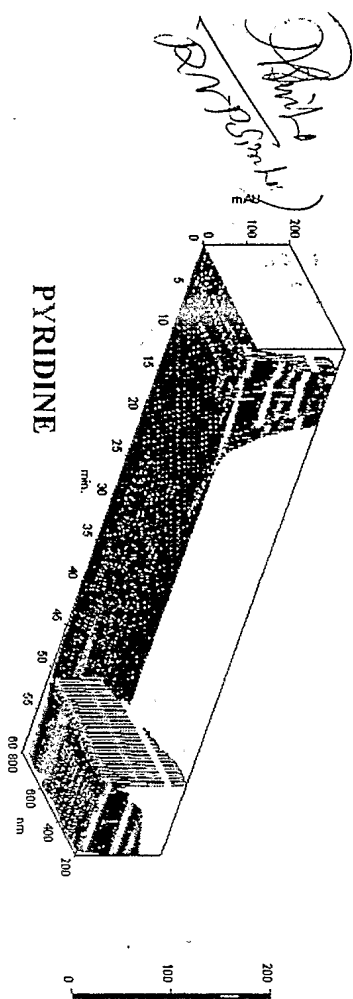
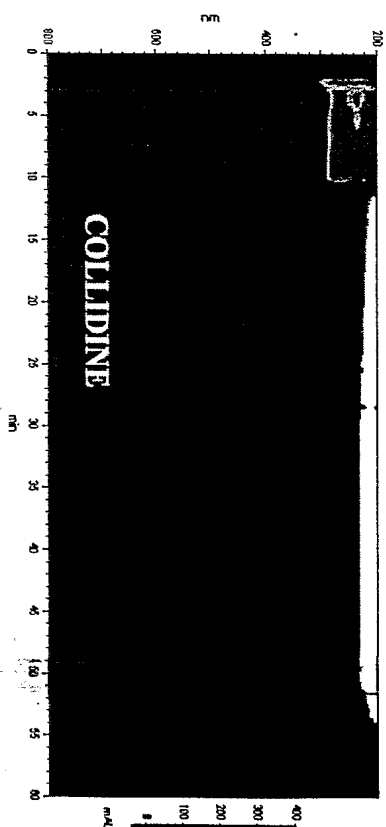
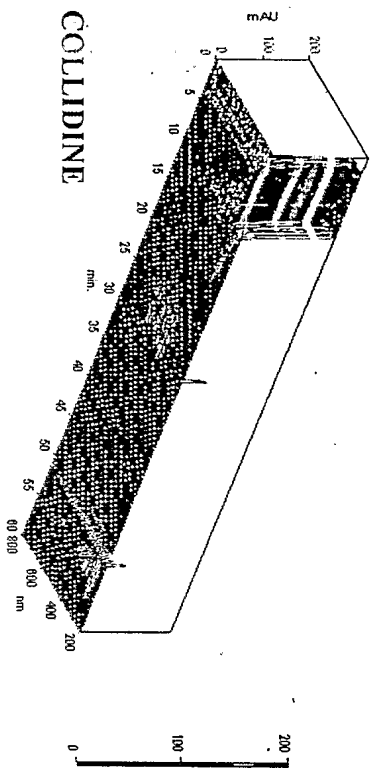
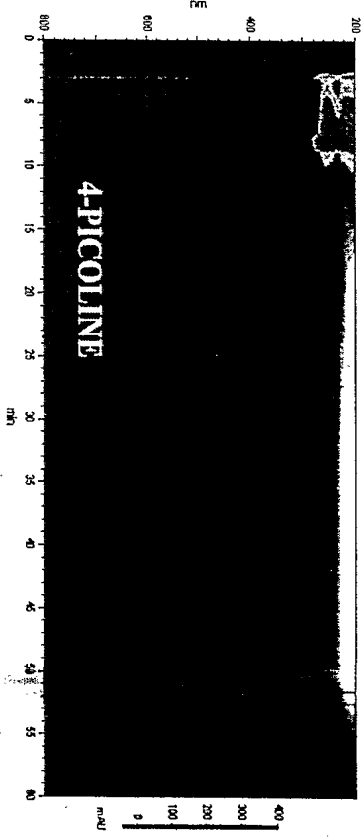
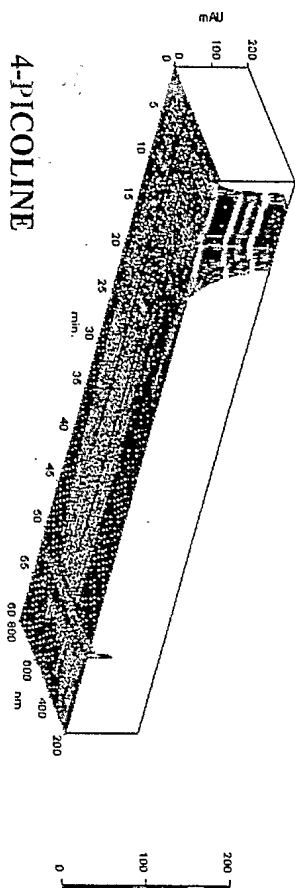
FIG 105



Dr. [Signature]
18/08/2018

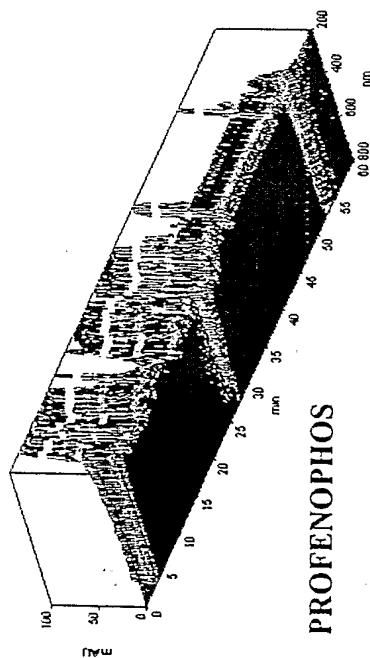
FINGERPRINTS OF TOXIC COMPOUNDS

FIG 106

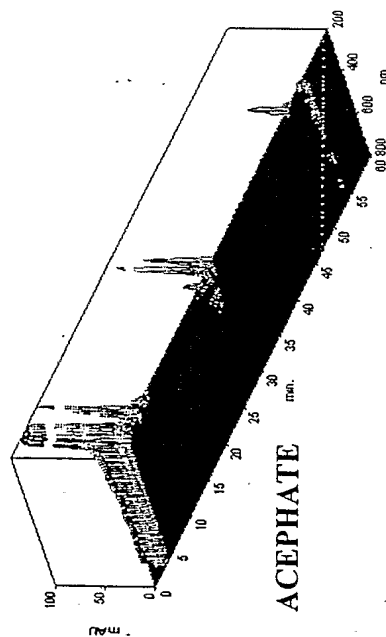


FINGERPRINTS OF PESTICIDES SAMPLES

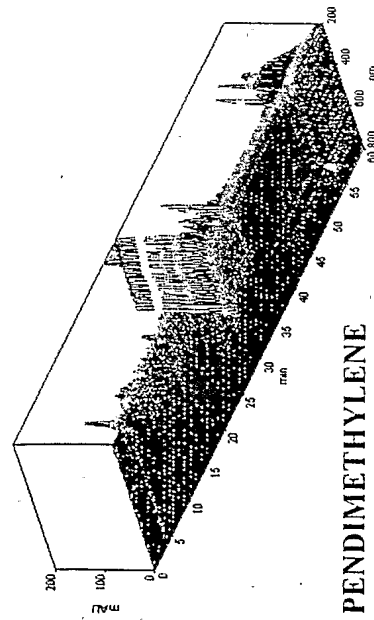
FIG 107



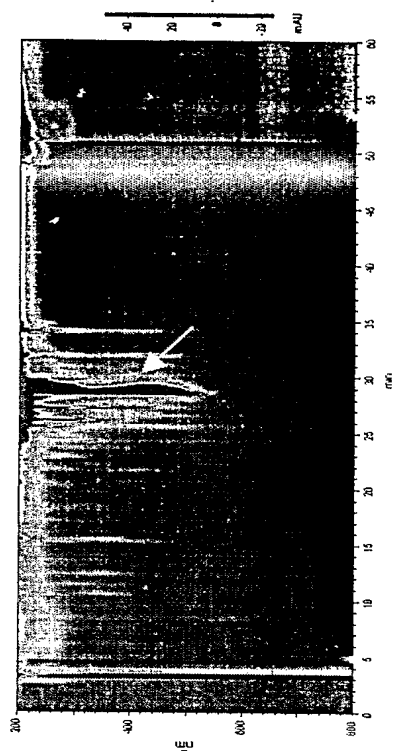
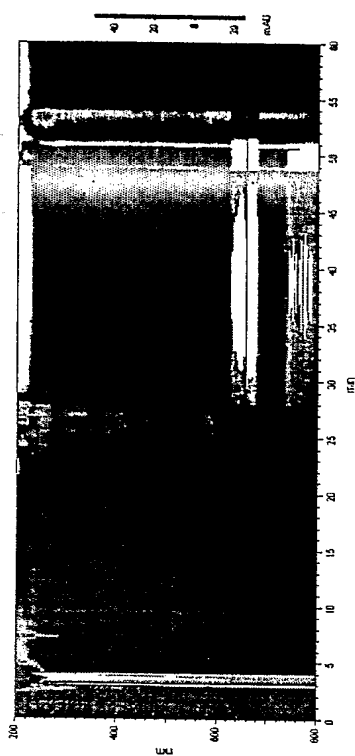
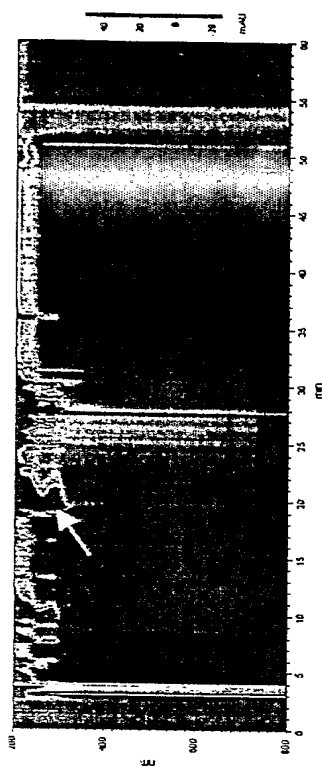
PROFENOPHOS



ACEPHATE



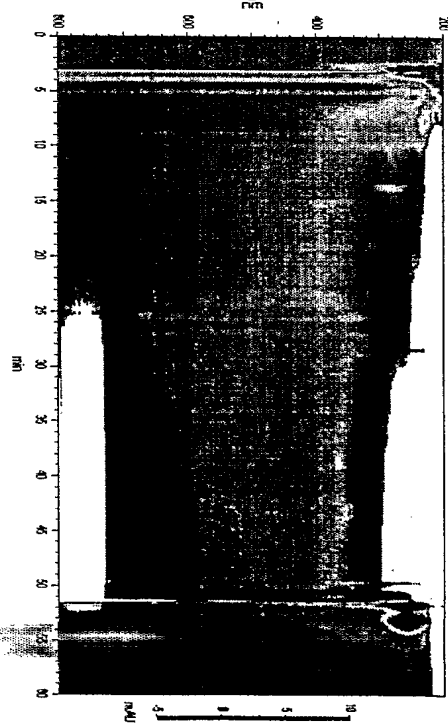
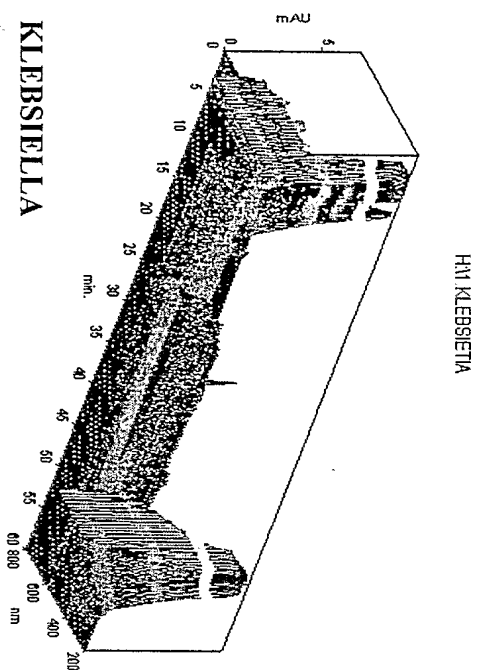
PENDIMETHYLENE



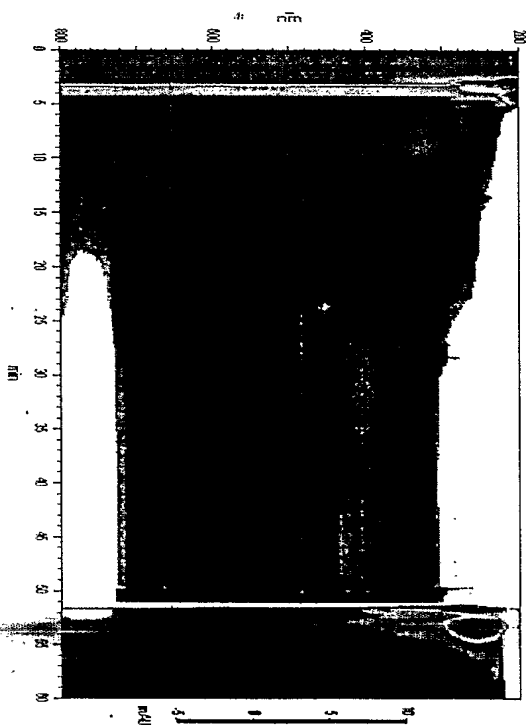
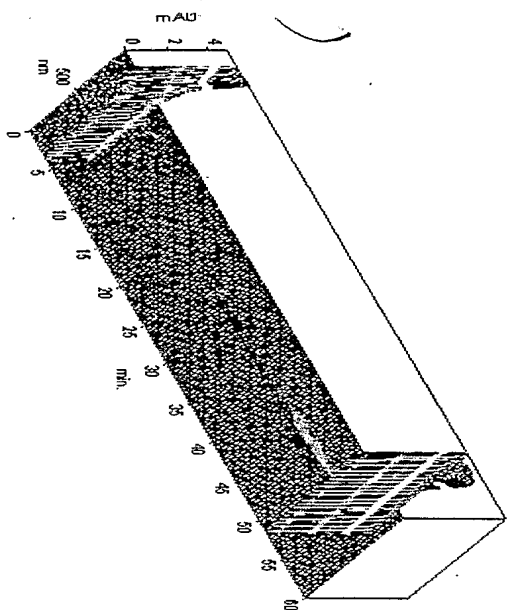
Handwritten signature and date:
 20/05/2016
 [Signature]

FINGERPRINTS OF MICROORGANISMS

FIG 108



HM STAPHYLO COCCUS

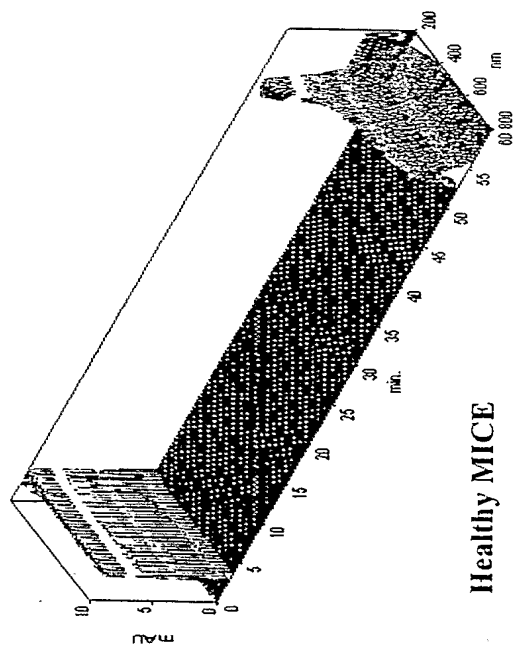


Staphylo coccus

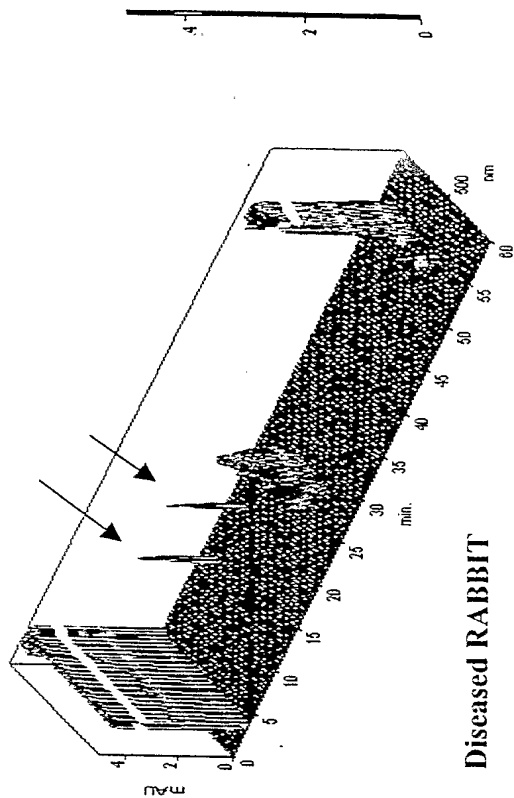
FINGERPRINTS OF ANIMAL AND HUMAN BLOOD SAMPLES

FIG 109

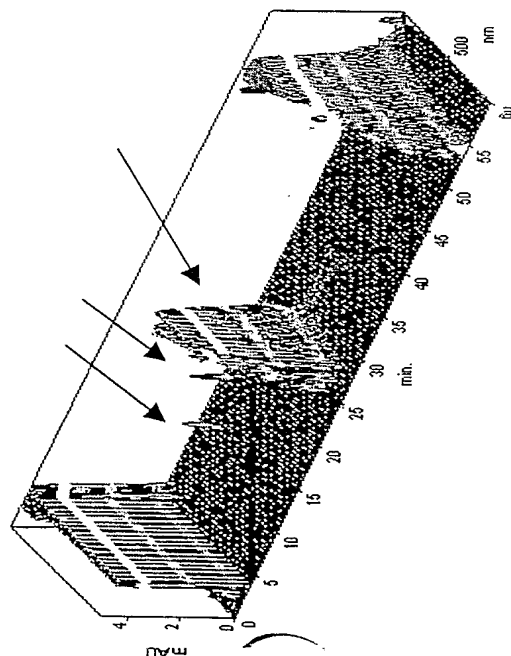
C:\CLASS-VP11 BLOOD SAMPLE OF MICE



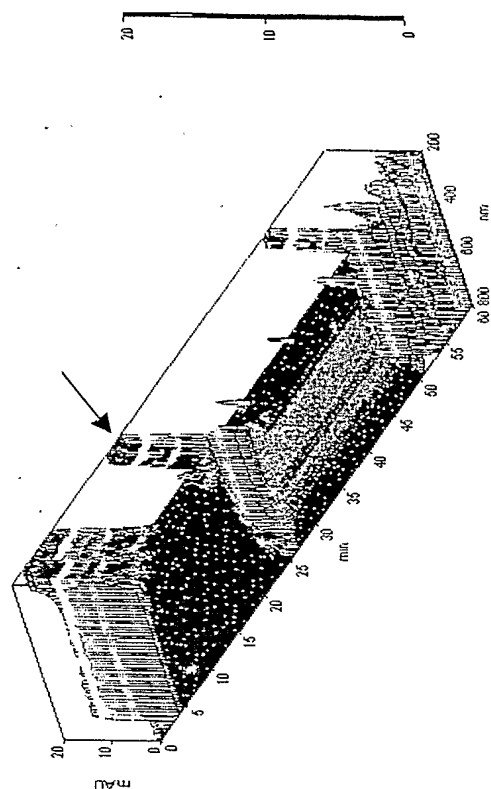
C:\CLASS-VP11 BLOOD SAMPLE OF RABBIT



C:\CLASS-VP11 RAT BLOOD SAMPLE



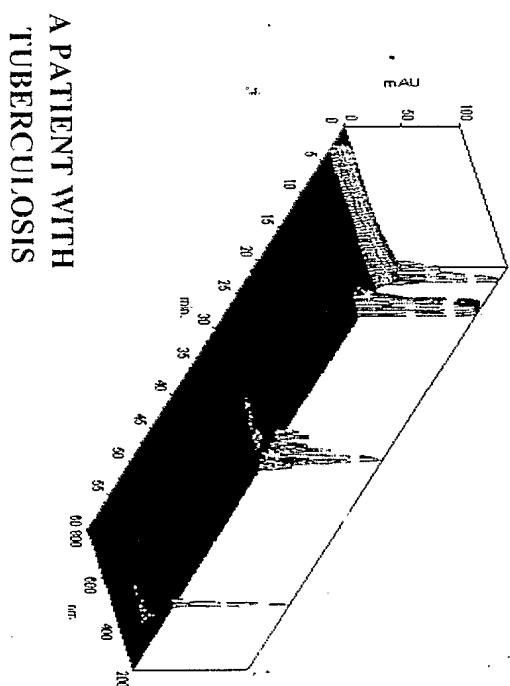
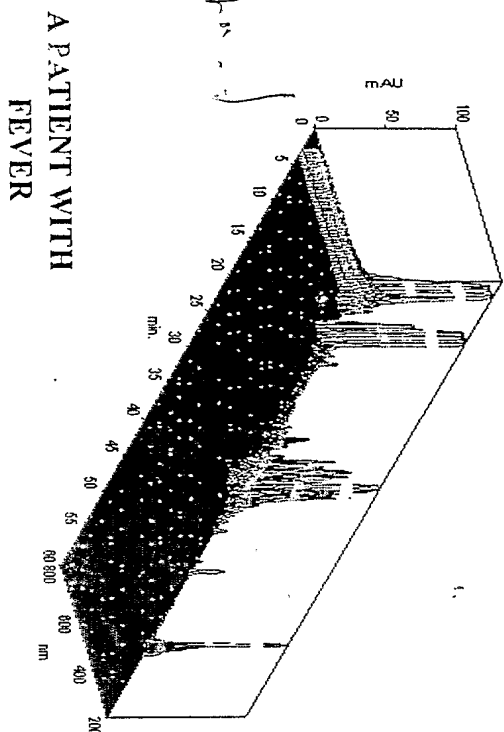
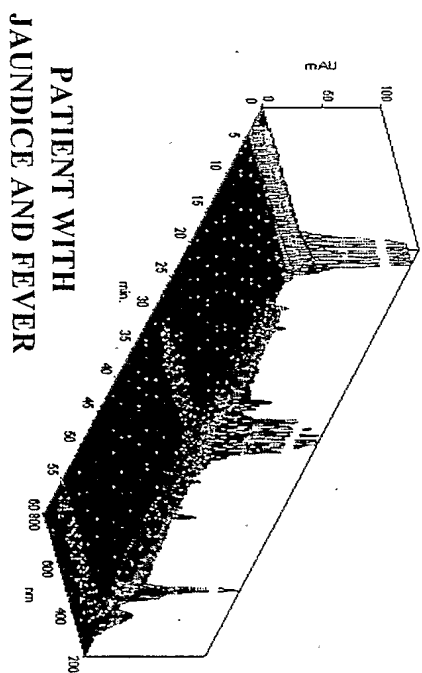
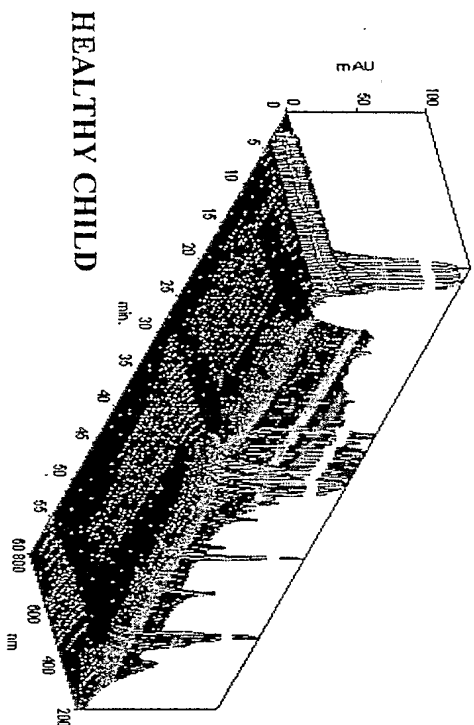
C:\CLASS-VP11 HEPATITIS E



Dr. P. S. Singh

HUMAN BLOOD SAMPLES

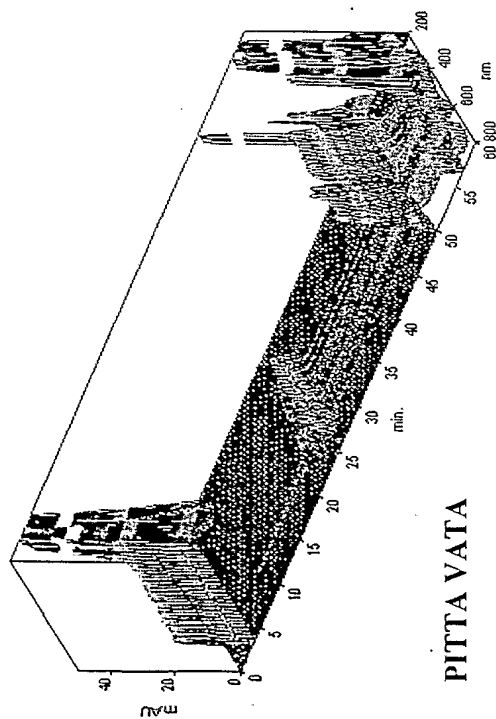
FIG 110



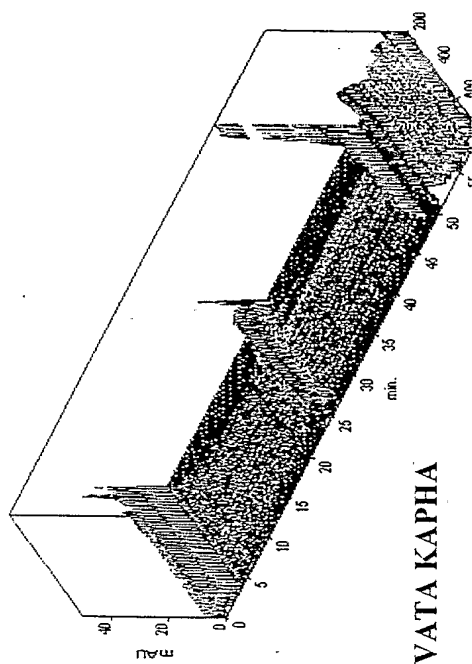
Dr. P. S. Singh

FIG 111

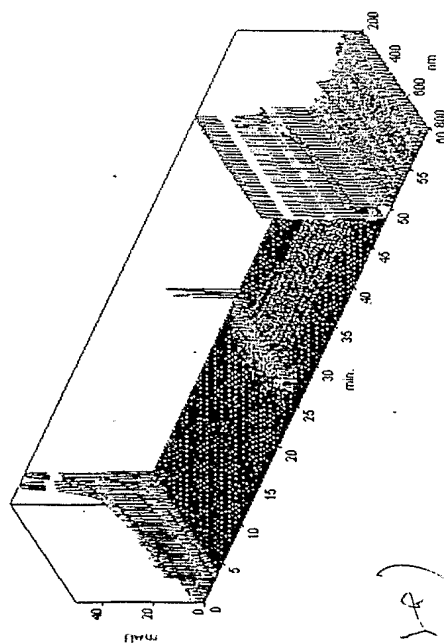
HEALTHY BLOOD SAMPLES



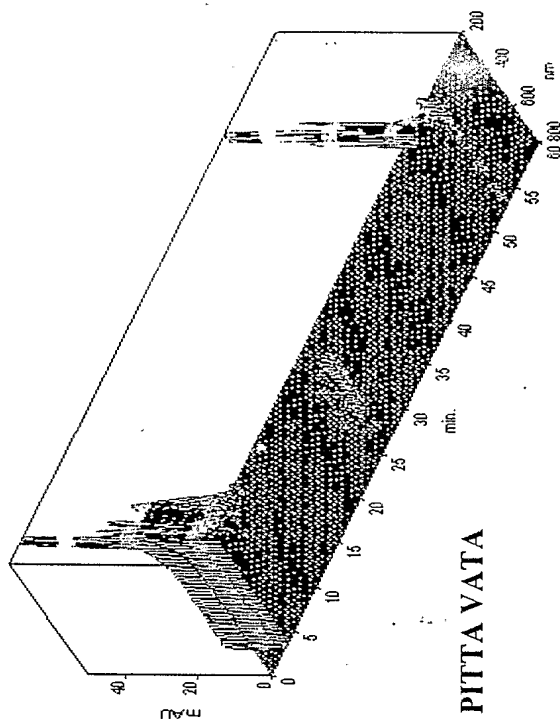
PITTA VATA



VATA KAPHA



VATA PITTA



PITTA VATA

(Rajiv Simla)

FIG 112

H11: CARDIAC PATIENT BLOOD

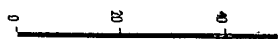


PATIENT 1

H11. CARDIAC PATIENT BLOOD



PATIENT 3



PATIENT 2

H11. CARDIAC PATIENT BLOOD

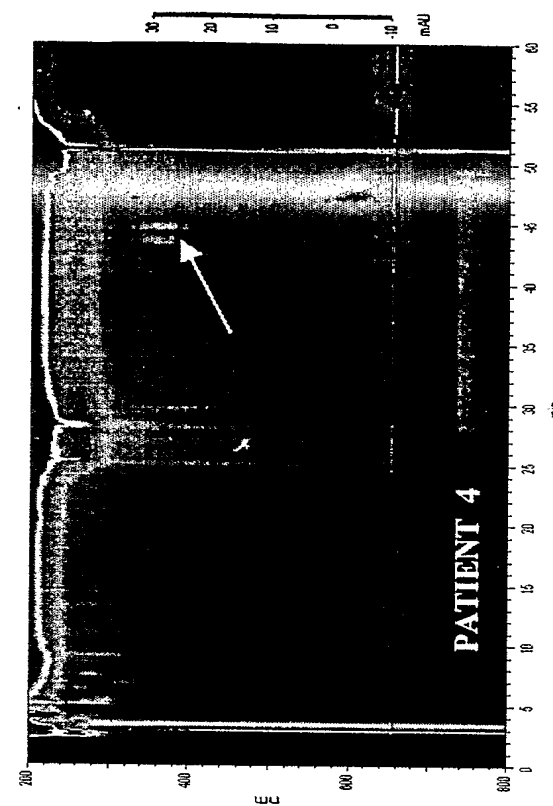
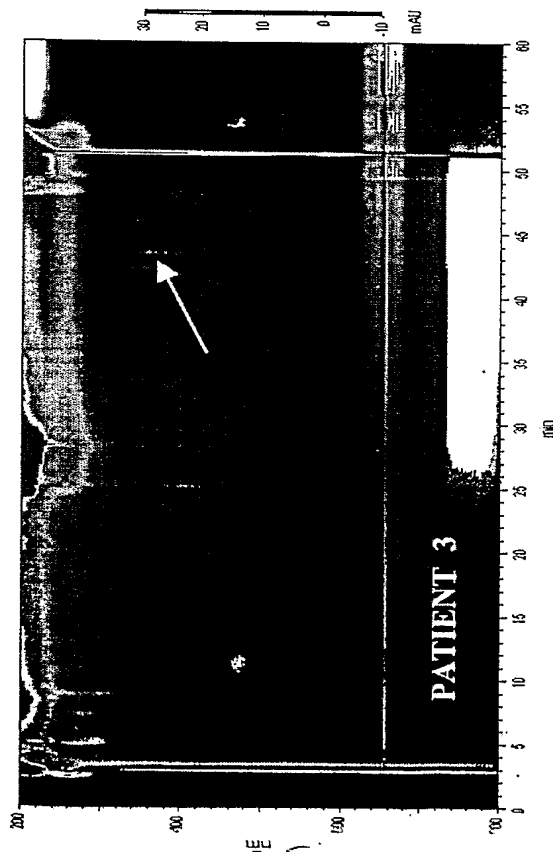
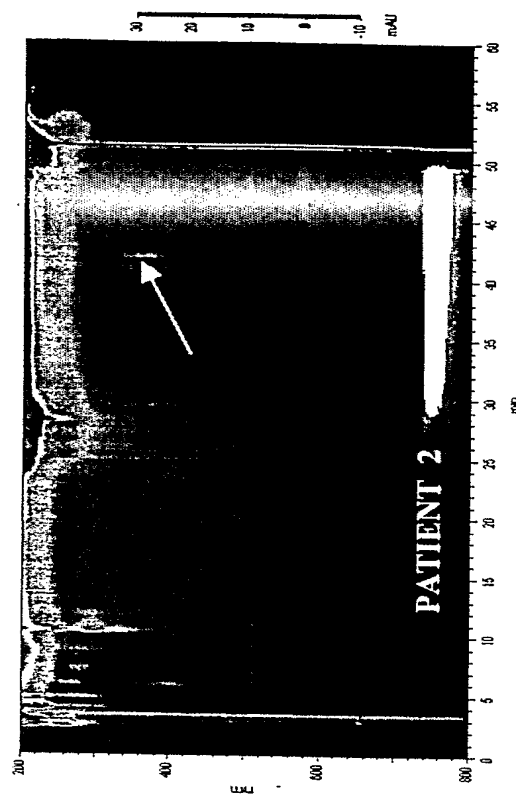
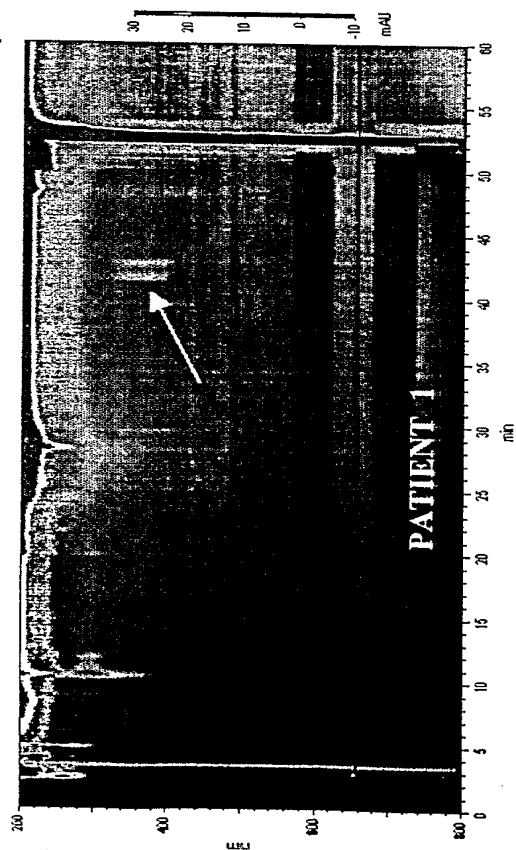


PATIENT 4

~~Q. 10~~

FIG 113

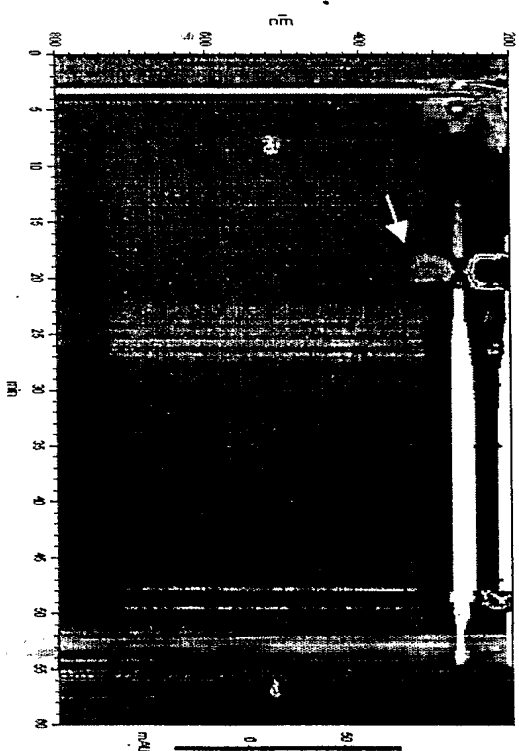
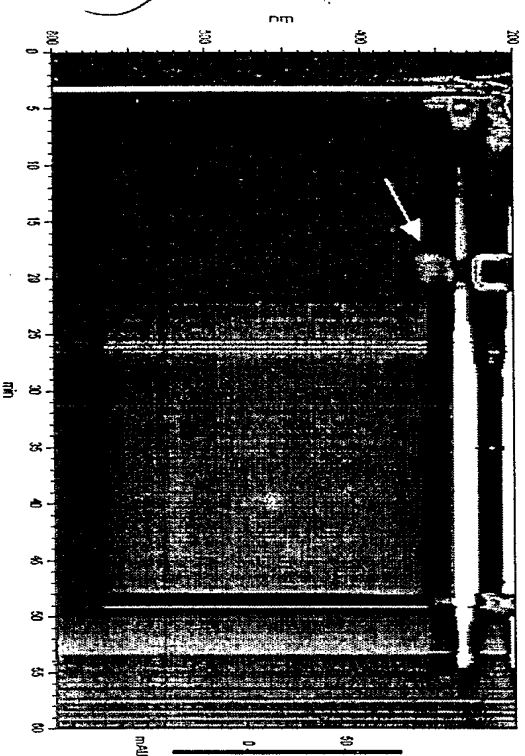
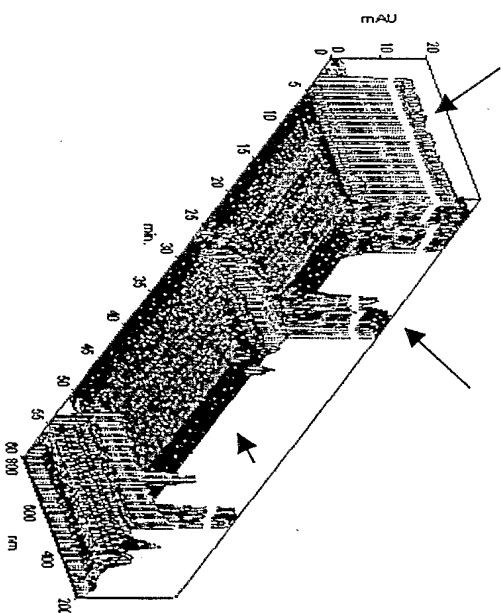
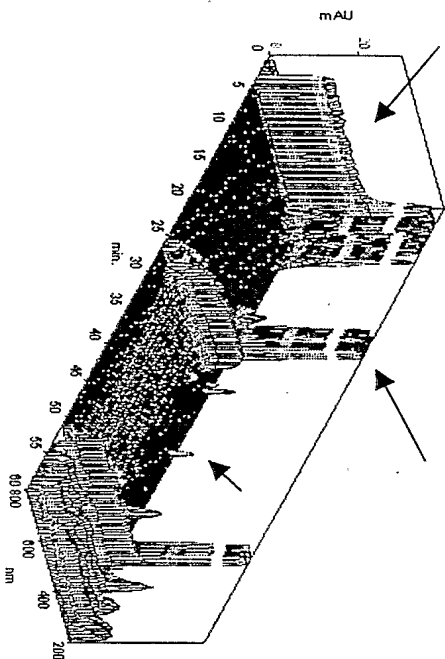
BLOOD SAMPLES OF CARDIAC PATIENTS



Handwritten signature and date:
12/15/81
[Signature]

FINGERPRINTS OF HEPATITIS DISEASE BLOOD SAMPLES

FIG 114



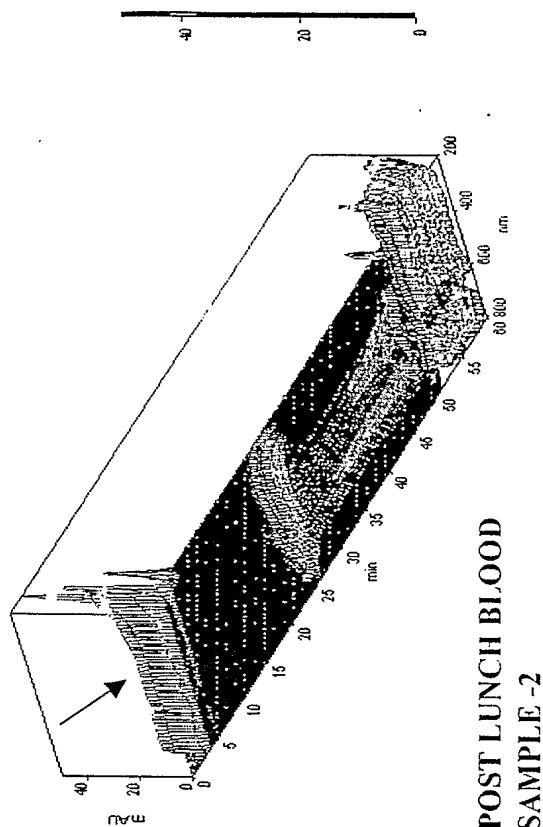
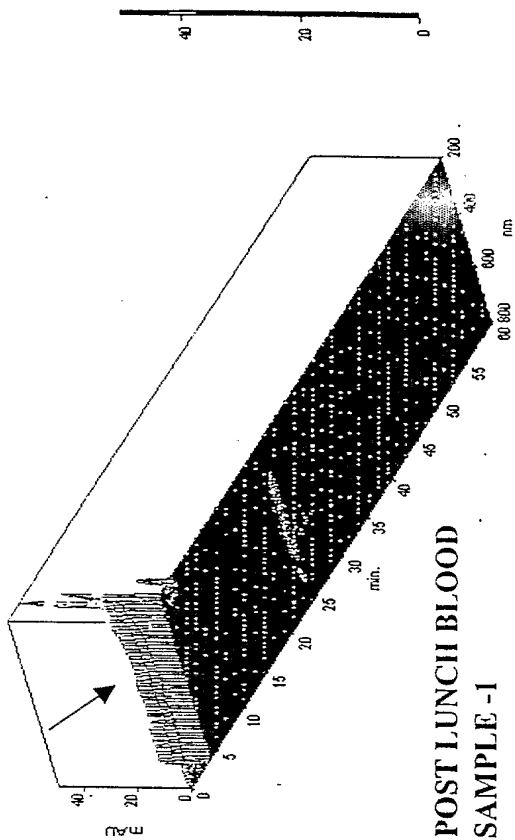
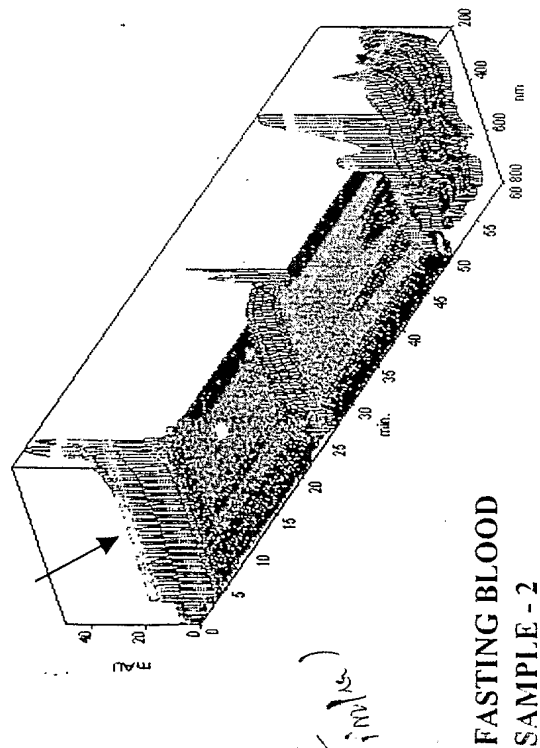
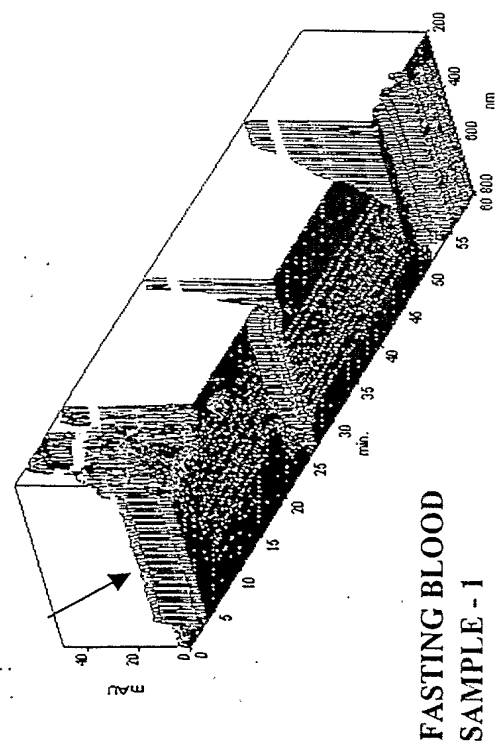
BLOOD SAMPLE OF
HEPATITIS 'B' PATIENT

BLOOD SAMPLE OF
HEPATITIS 'C' PATIENT

(Signature)
RNP (Sinks)

BLOOD SAMPLES OF DIABETIC PATIENTS

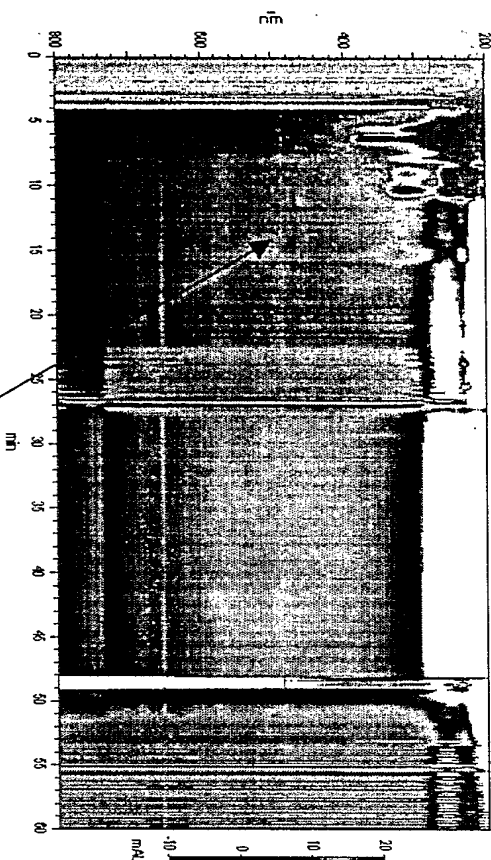
FIG 115



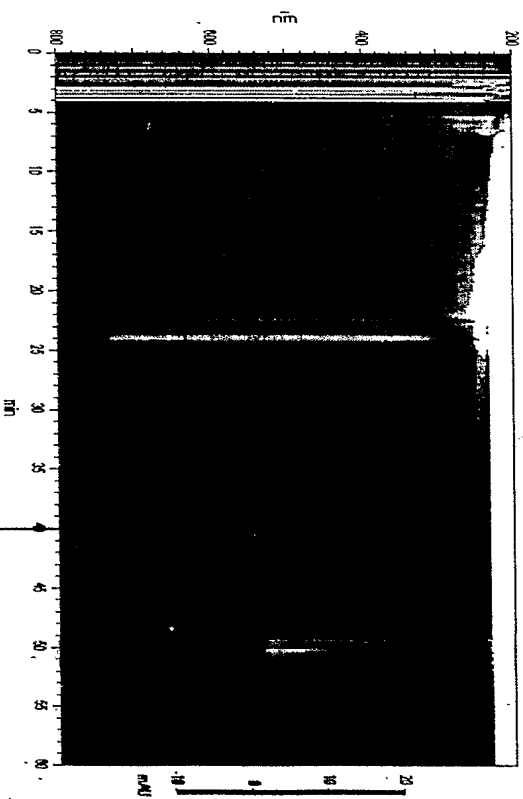
Dr. J. G. Simola
(Dr. J. G. Simola)

BLOOD SAMPLES OF DIABETIC PATIENTS

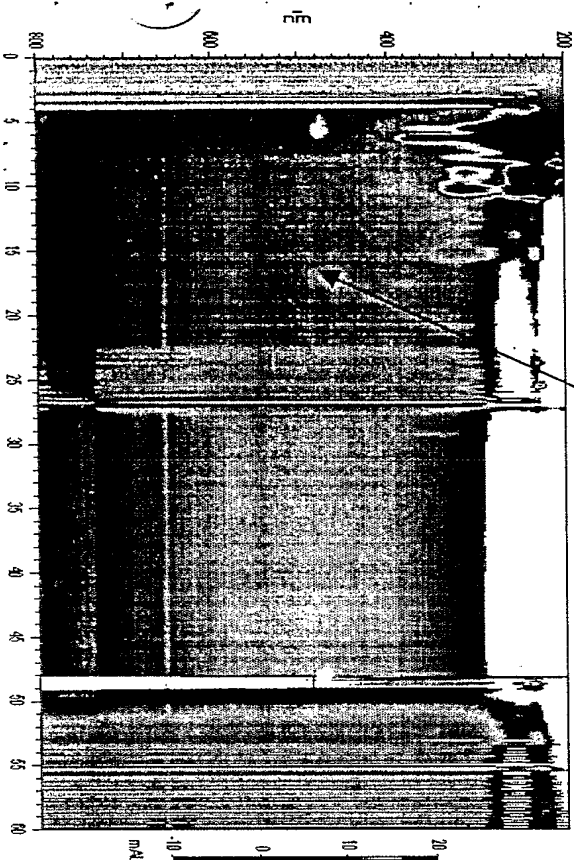
FIG 116



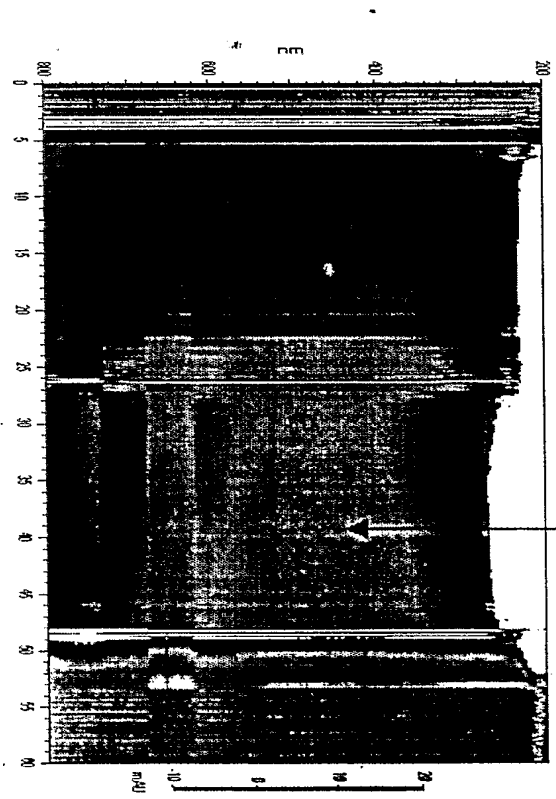
FASTING BLOOD SAMPLE



POST LUNCH BLOOD SAMPLE



FASTING BLOOD SAMPLE

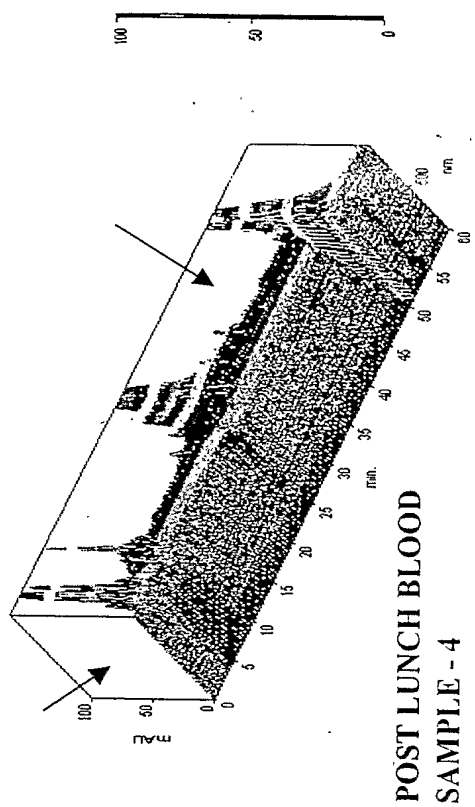
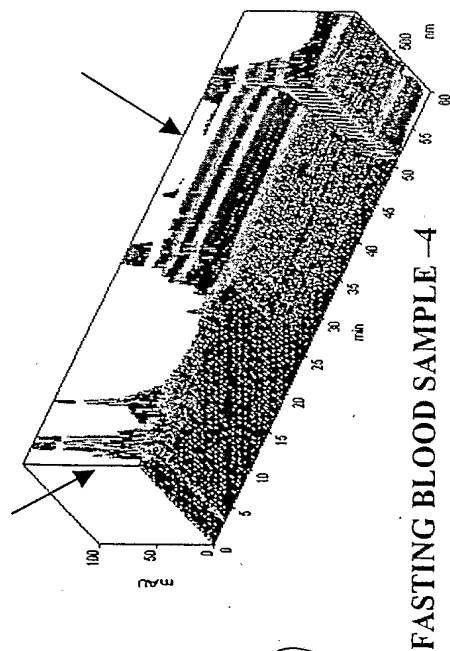
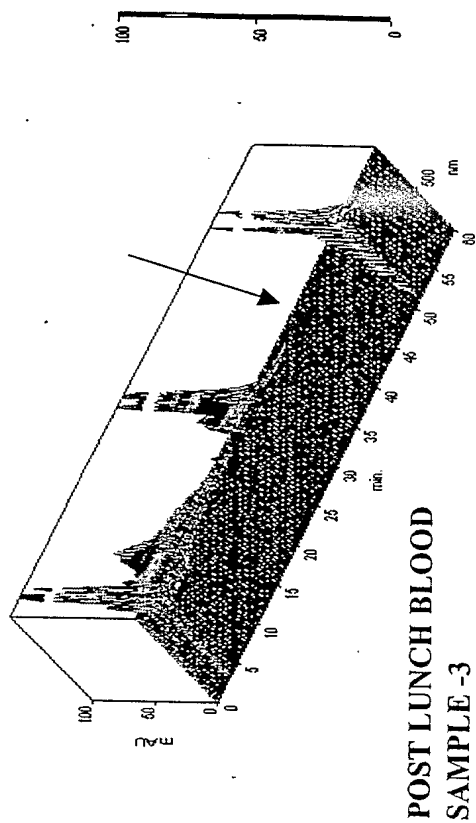
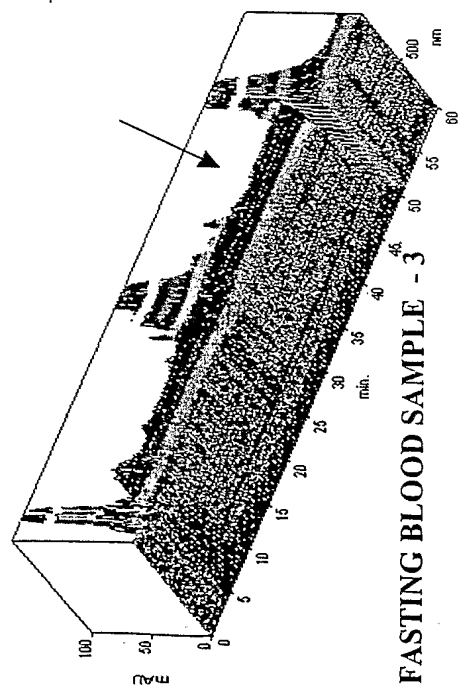


POST LUNCH BLOOD SAMPLE

Dr. P. S. S. (Signature)

BLOOD SAMPLES OF DIABETIC PATIENTS

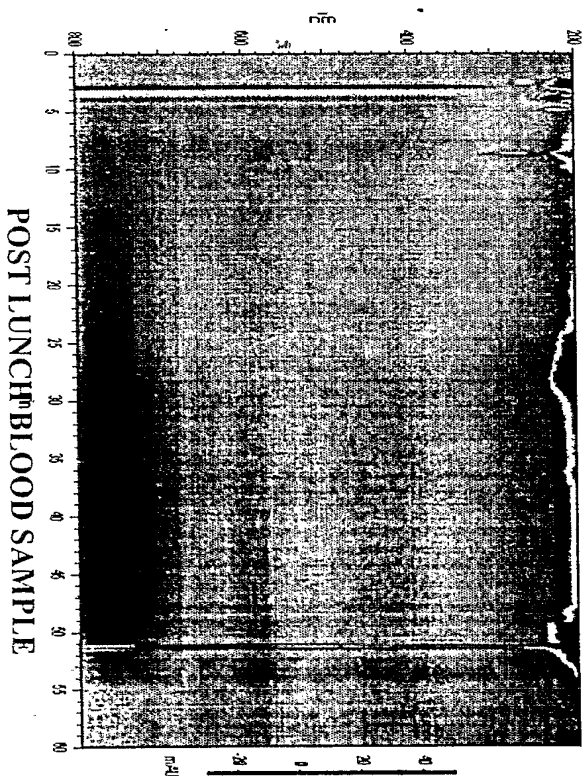
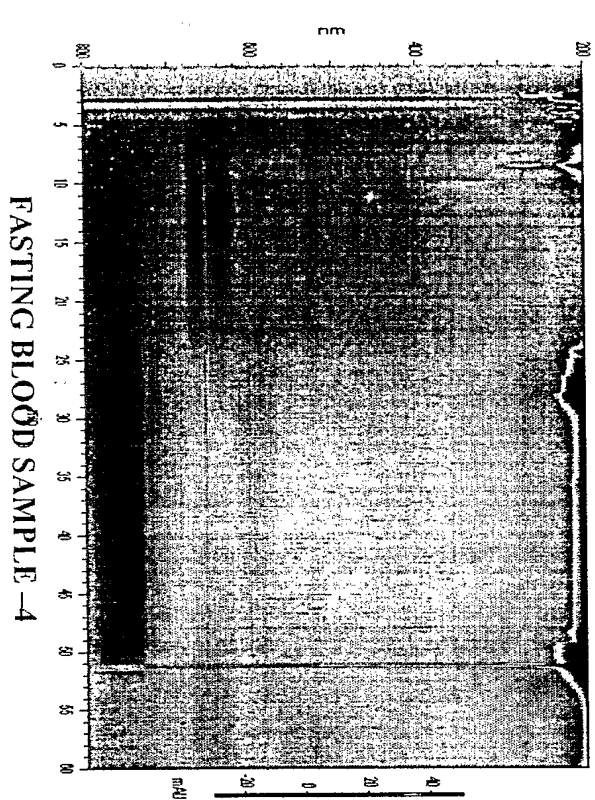
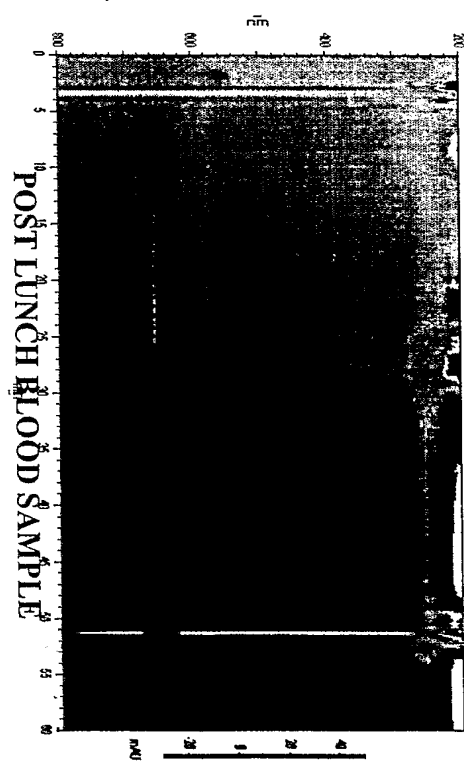
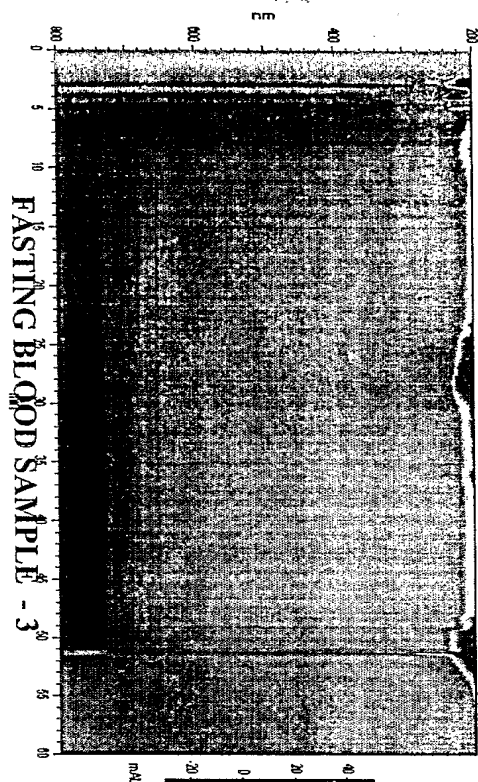
FIG 117



Handwritten signature and text:
Kyr Smith
Kyr Smith

BLOOD SAMPLES OF DIABETIC PATIENTS

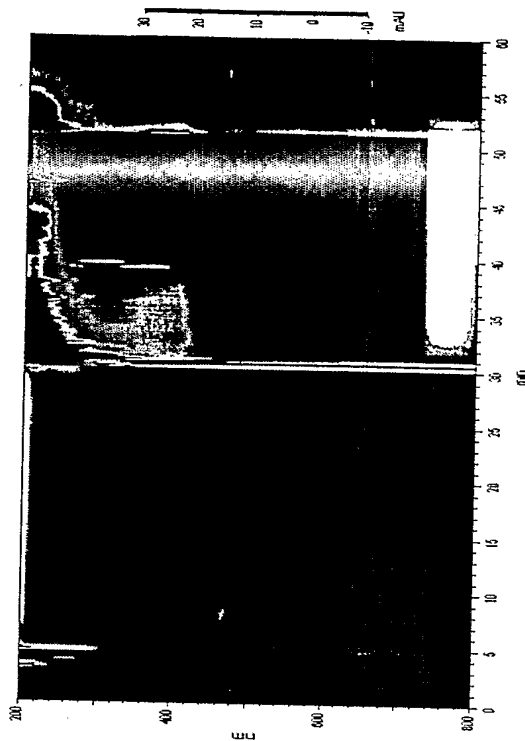
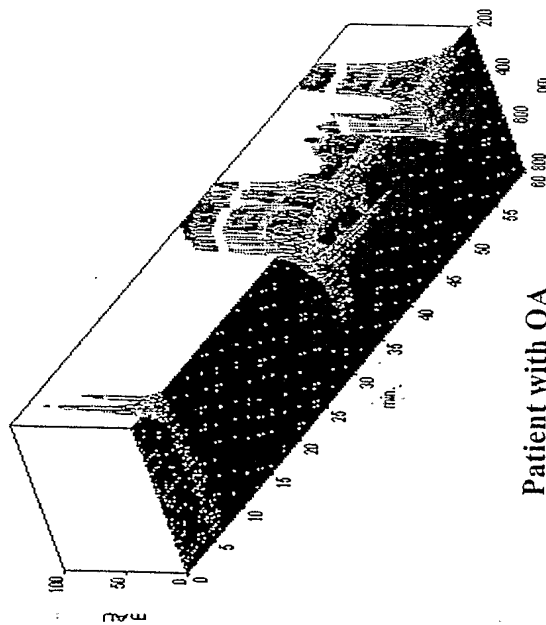
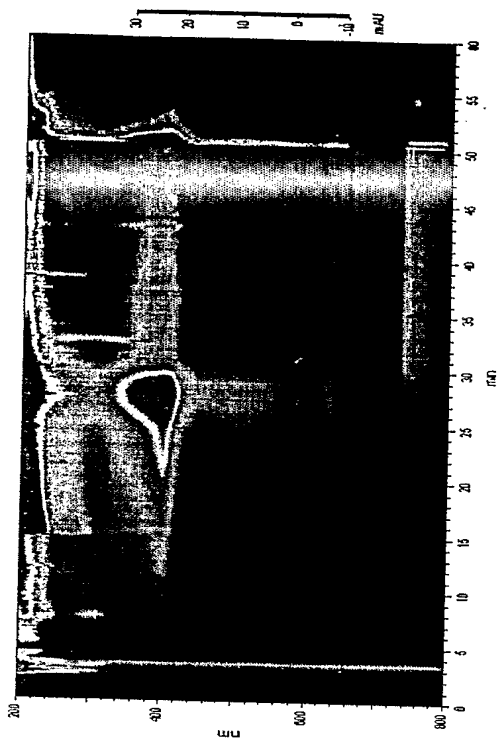
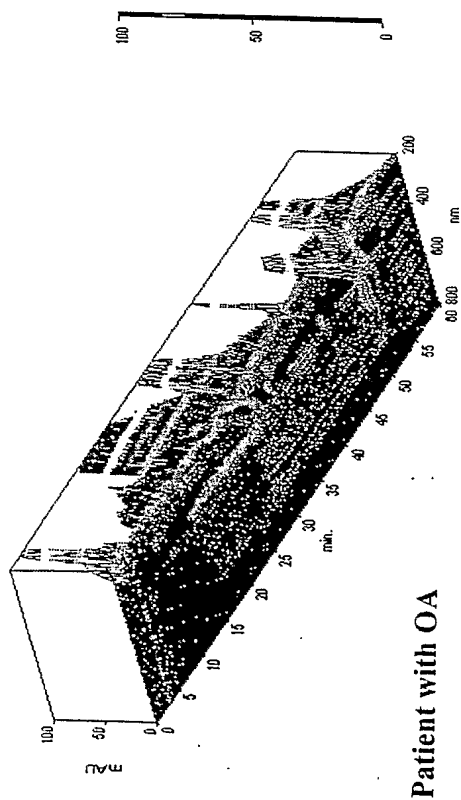
FIG 118



Dr. R. S. (RIN Sample)

HUMAN BLOOD SAMPLES

FIG 119

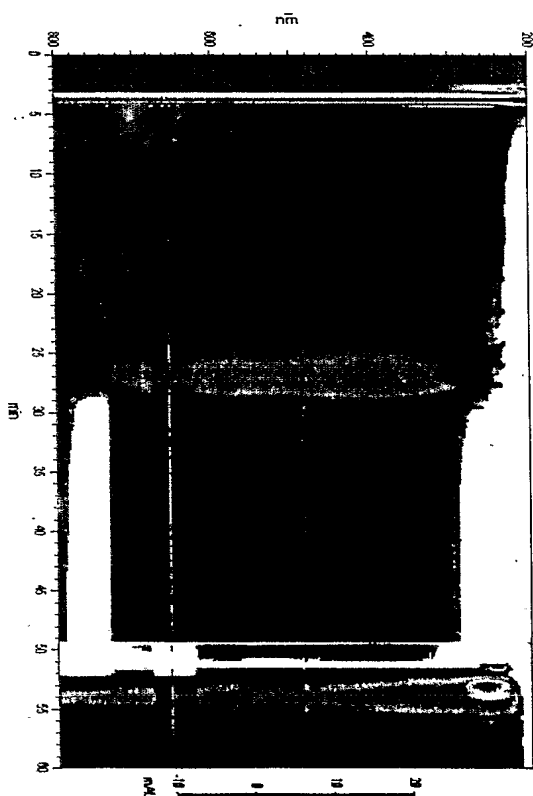
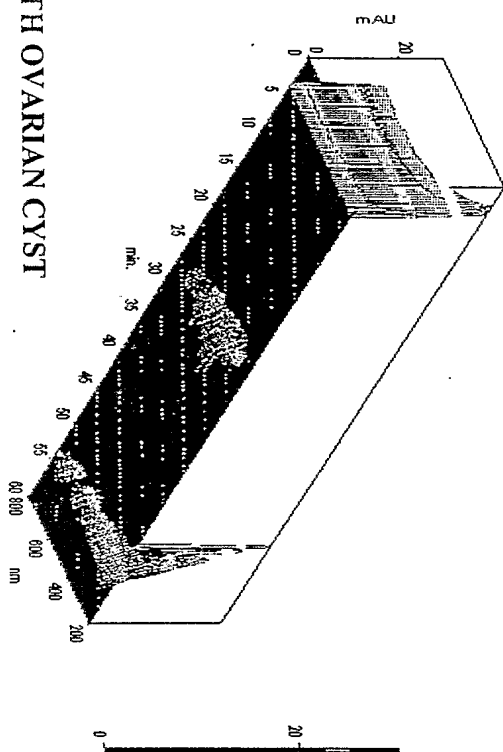


(Dr. N. P. Singh)

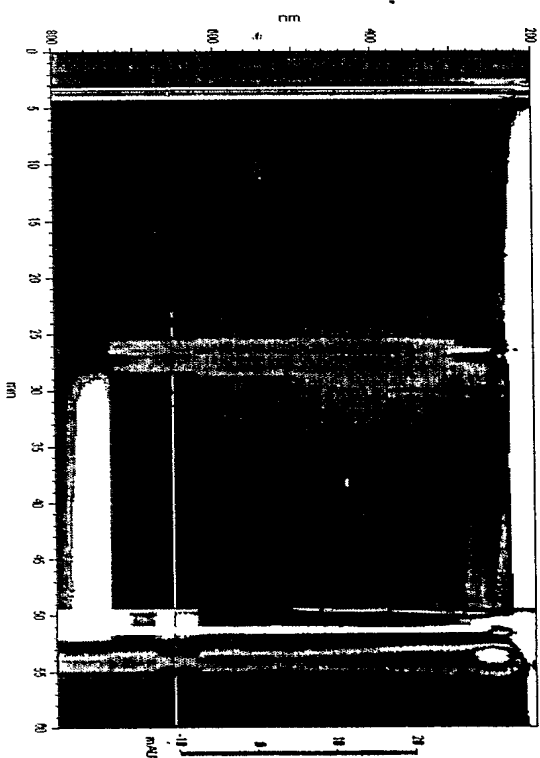
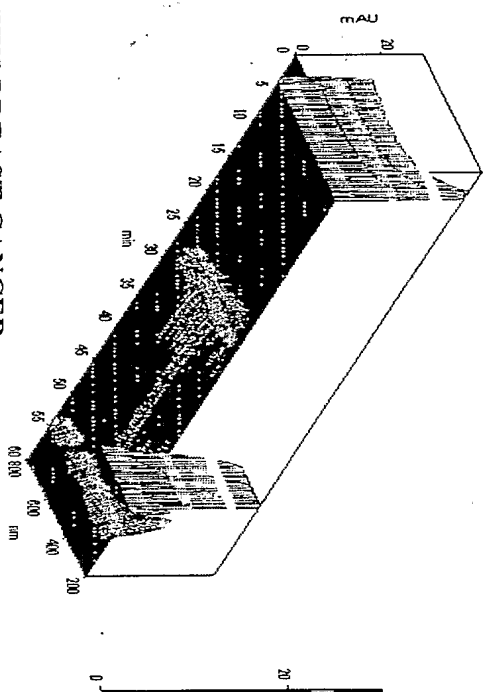
BLOOD SAMPLE OF DISEASED PATIENTS

FIG 120

WITH OVARIAN CYST



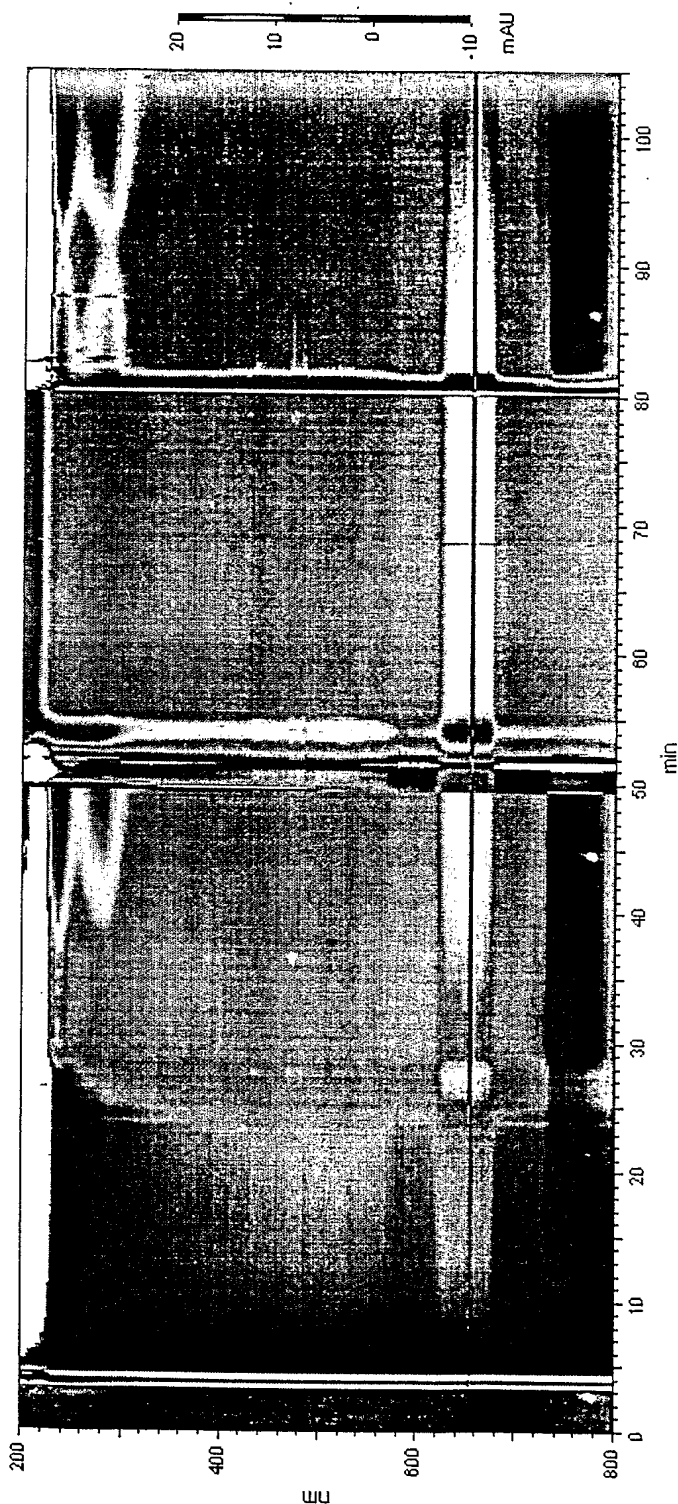
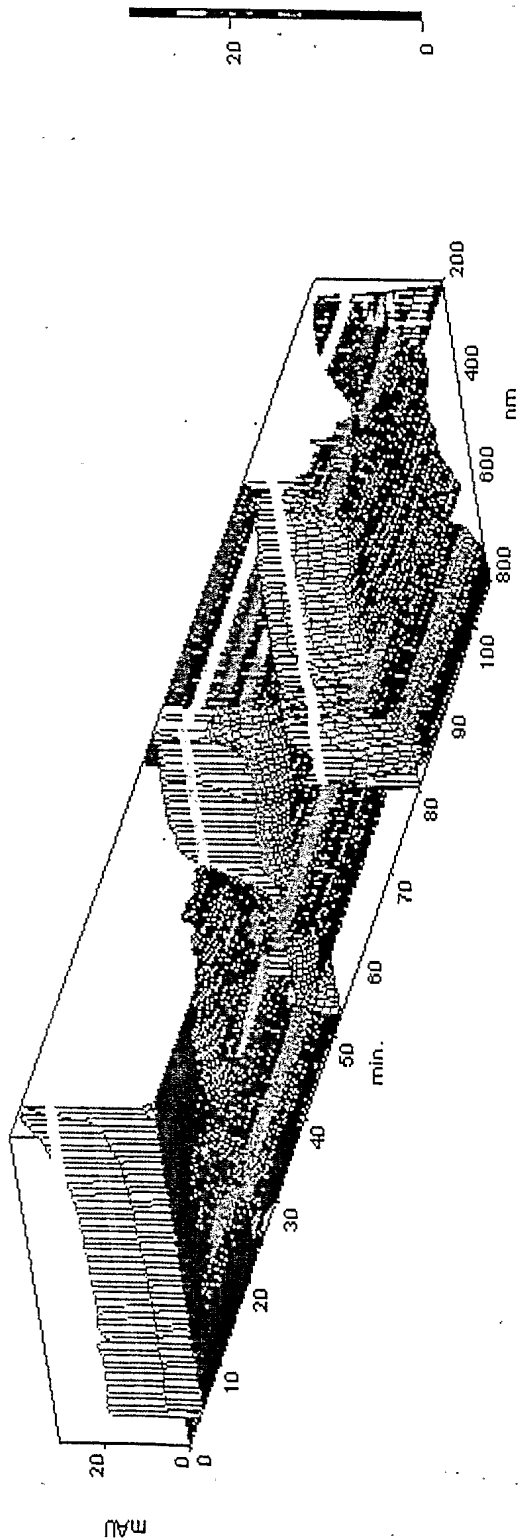
WITH BREAST CANCER



(Handwritten signature)
(Handwritten text)

BLOOD SAMPLE OF PATIENT WITH BRAIN TUMOUR (GLIOMA)

FIG 121

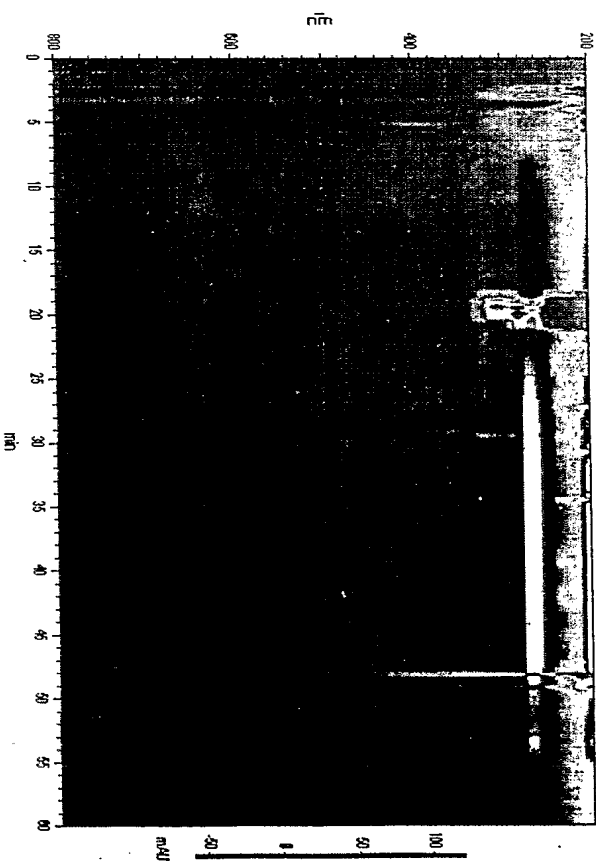
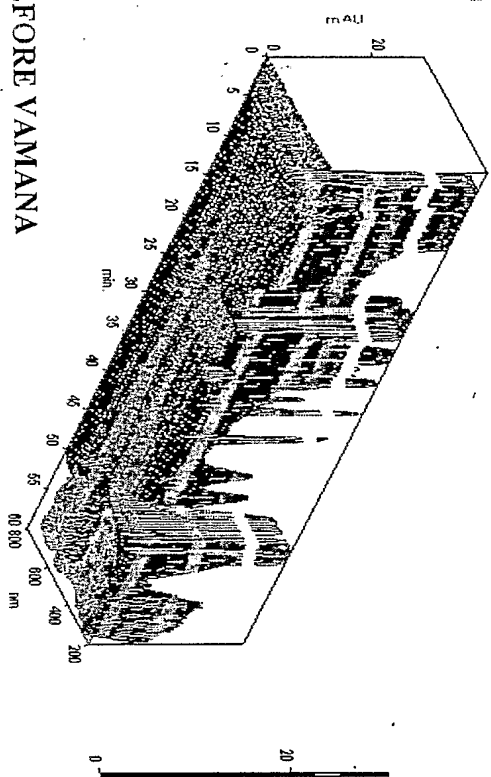


(DNP Simila)

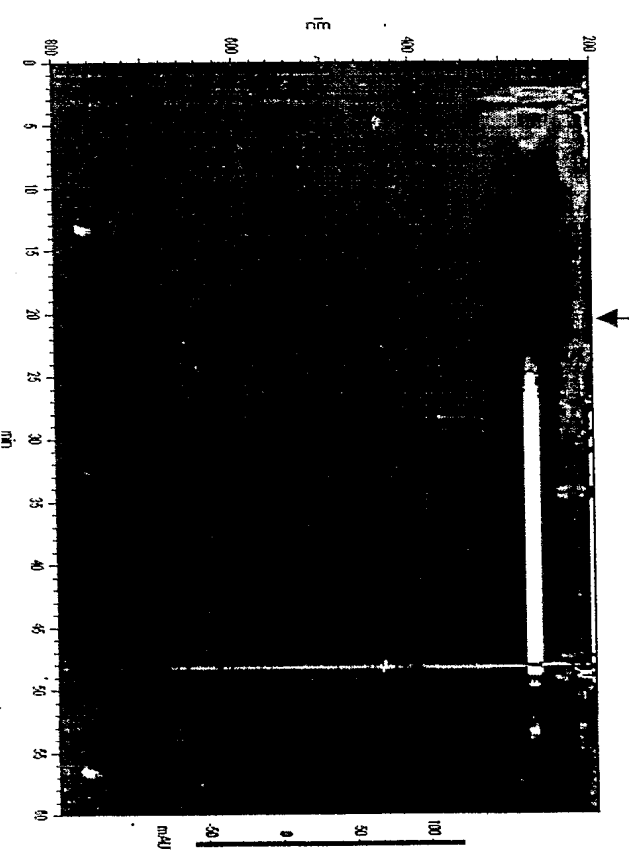
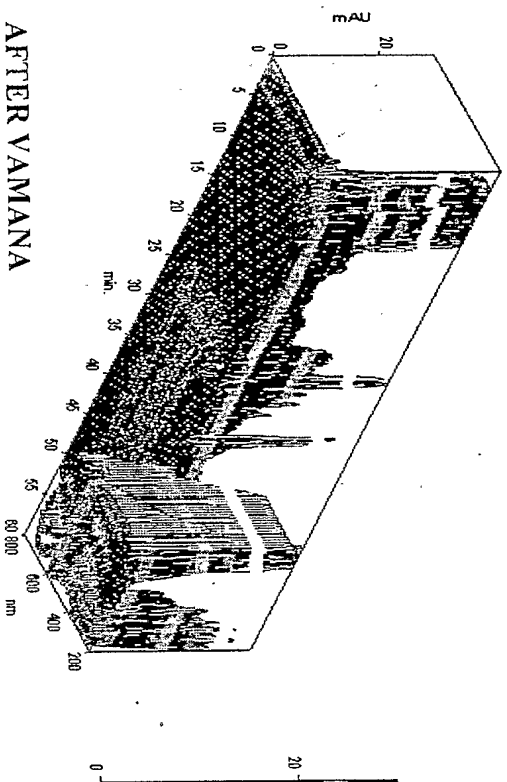
PANCHAKARMA OF A PSORIASIS PATIENT

FIG 122

BEFORE VAMANA



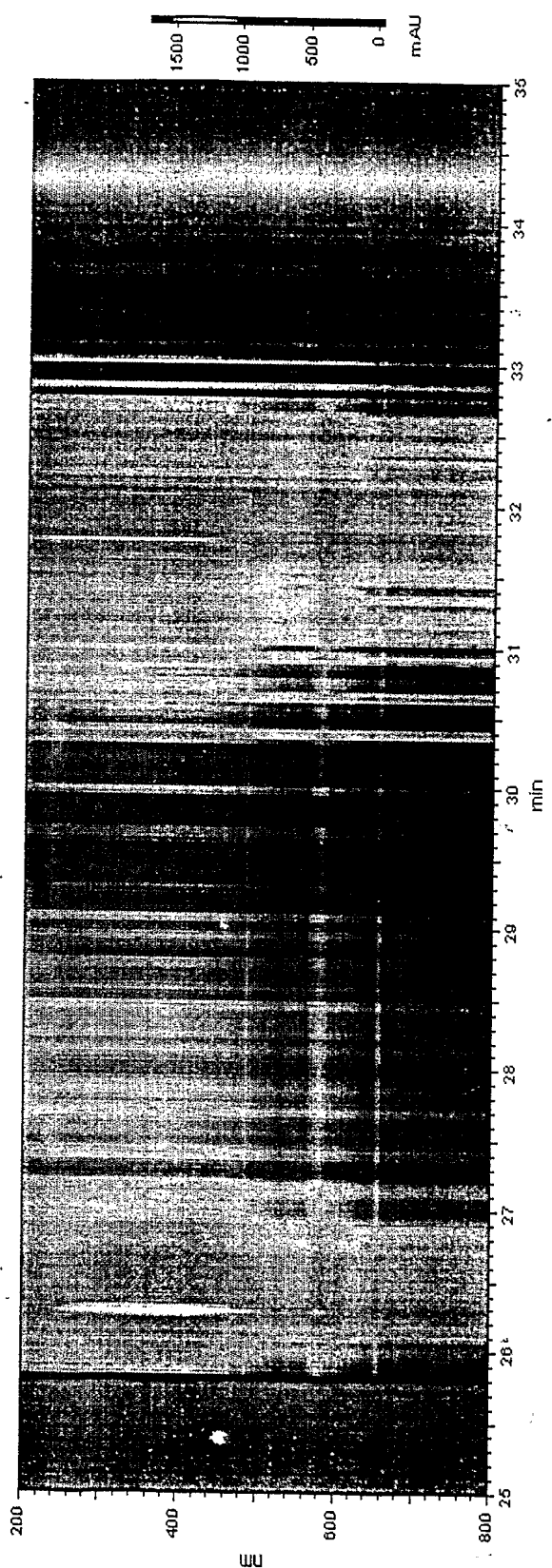
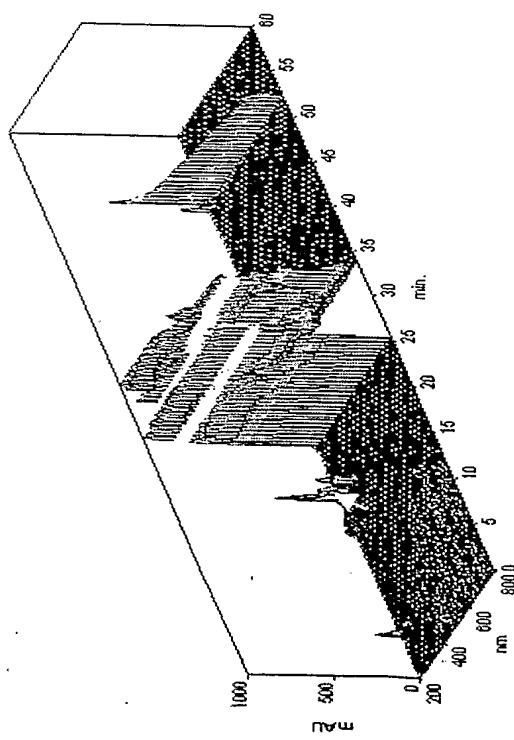
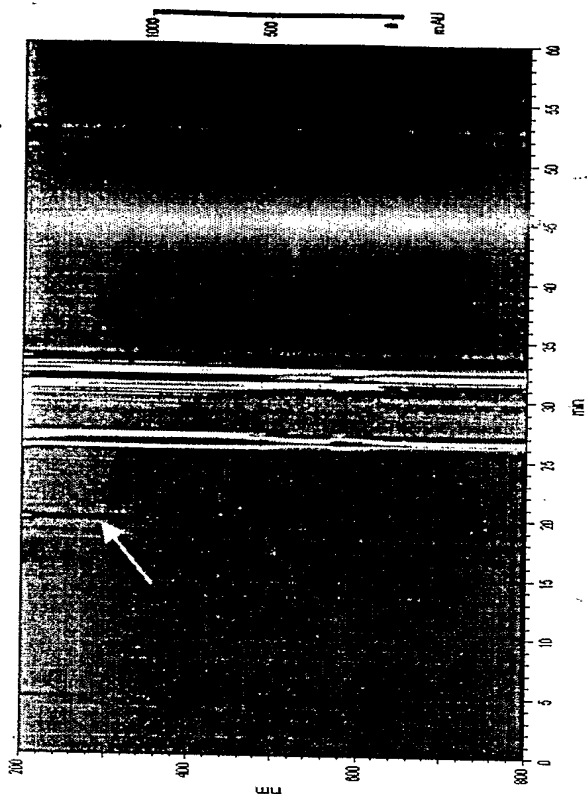
AFTER VAMANA



Dr. R. N. Singh
(R.N.Singh)

DNA OF ANIMAL

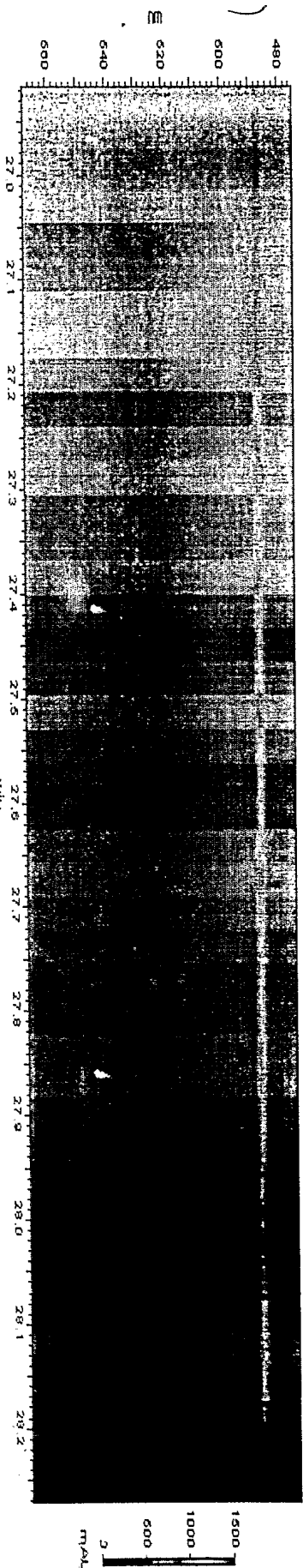
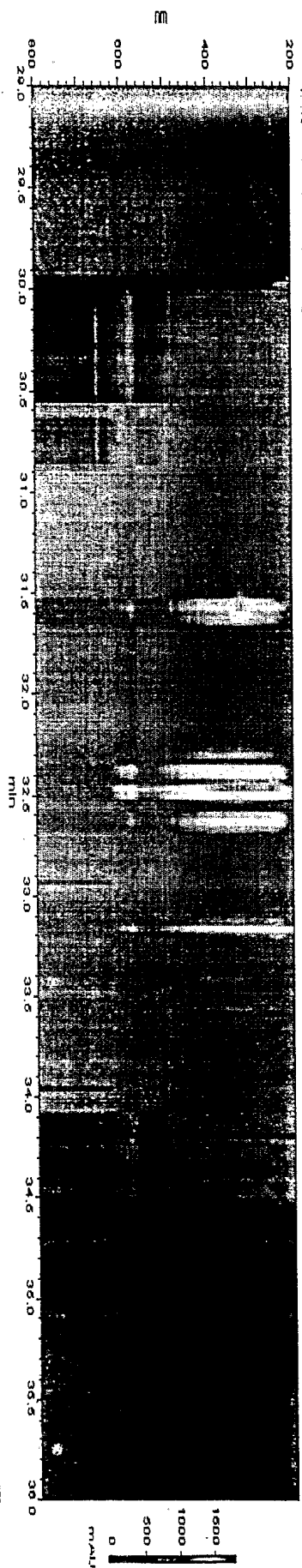
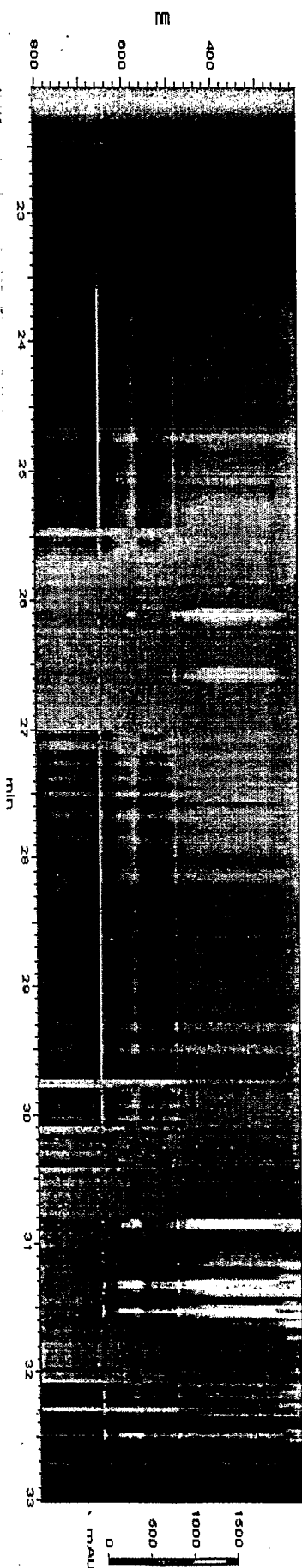
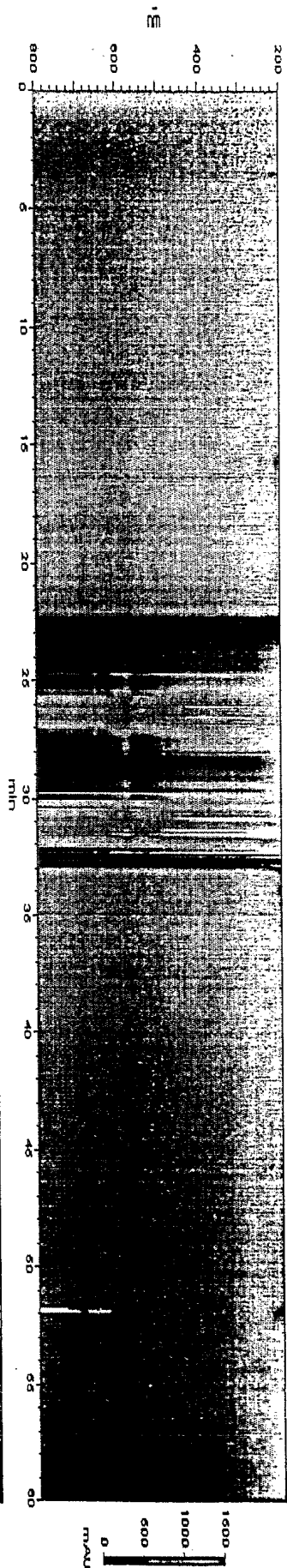
FIG 123



Handwritten signature and text:
 (12/13/2013)
 Smith & Jones

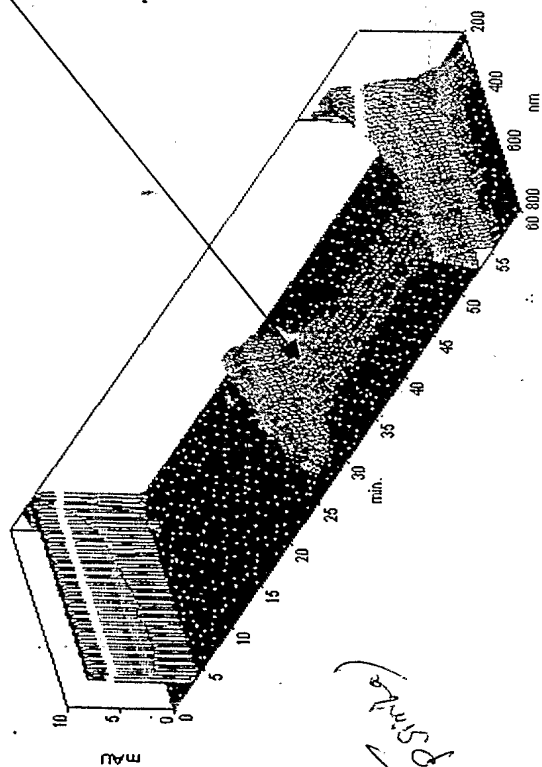
DNA OF ANIMAL (ZOOMED)

FIG 124

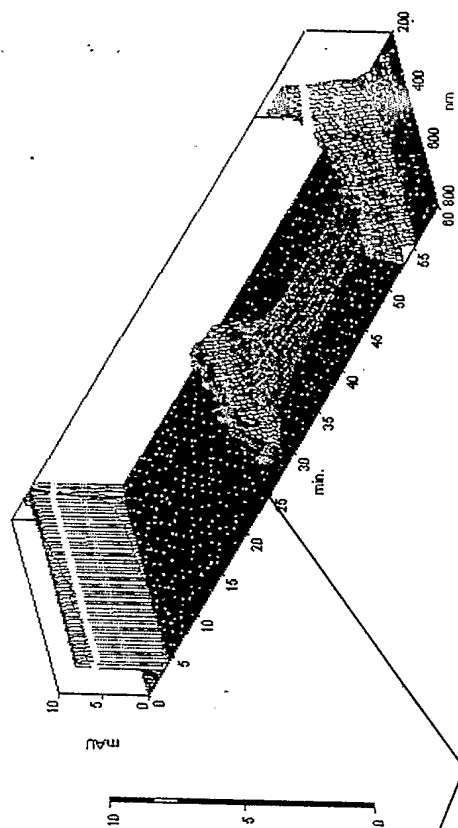


Handwritten notes:
1. (Sample)
2. (Sample)

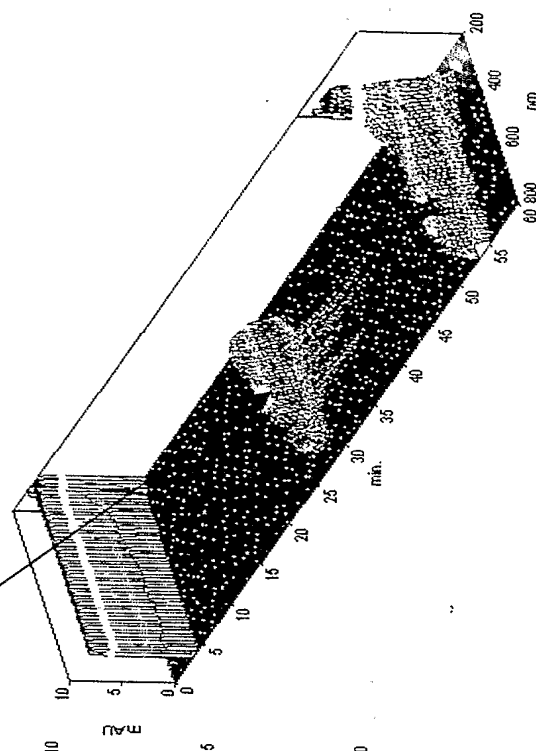
FIG 125



~~AMA IS SAID TO BE THE ROOT
CAUSE OF THE DISEASE~~



1. OSTEOARTHRITIS

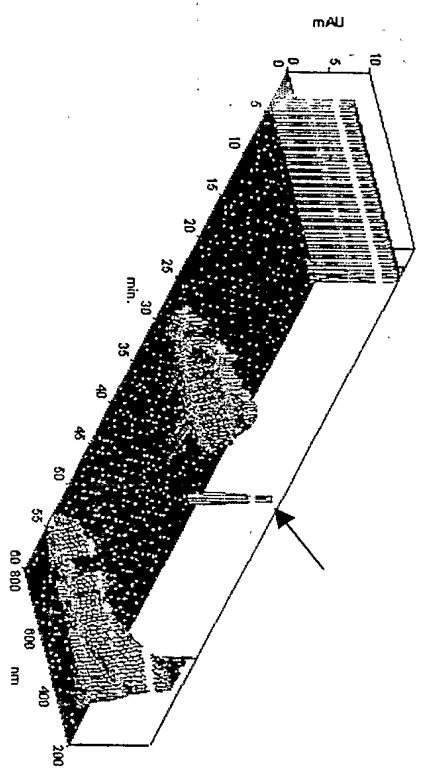


~~Don't know~~

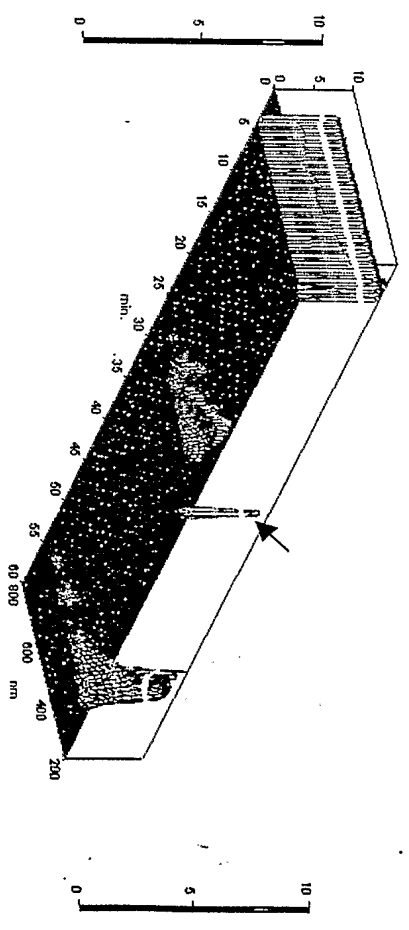
BLOOD SAMPLES OF RHEUMATOID ARTHRITIS PATIENTS

FIG 126

RHEUMATOID ARTHRITIS

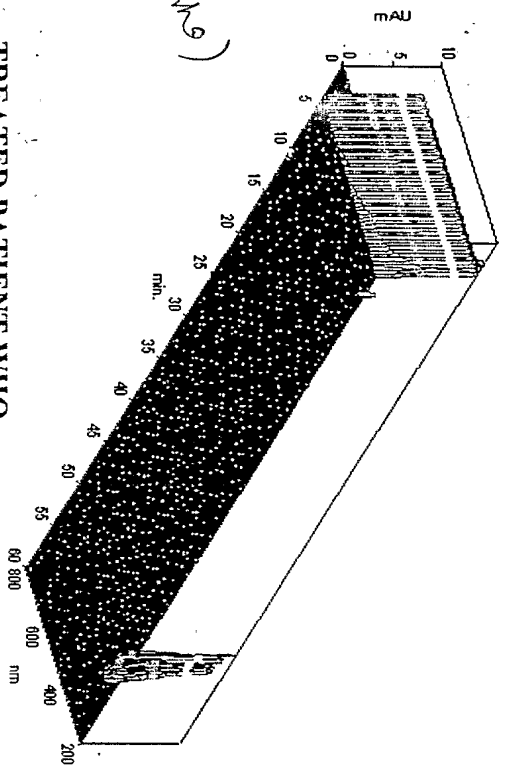


RHEUMATOID ARTHRITIS

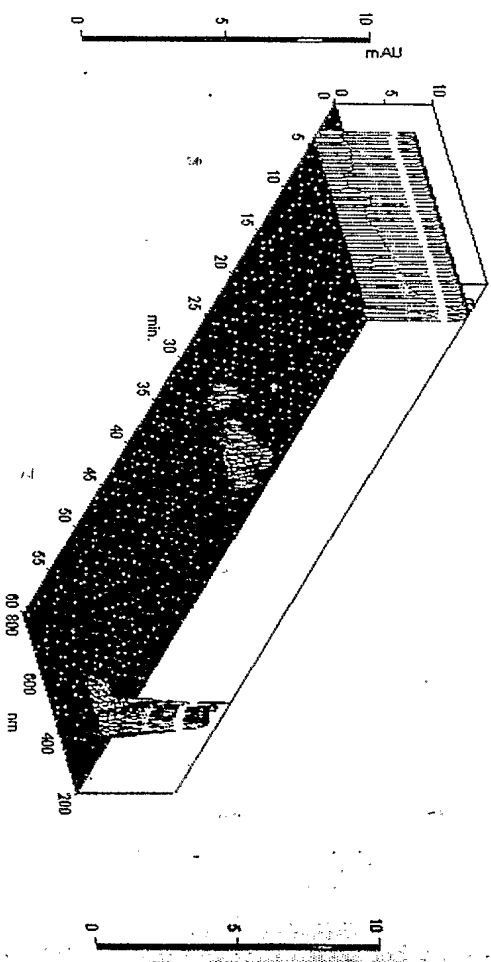


PATIENT SUFFERING WITH RHEUMATIC PAINS

RHEUMATOID ARTHRITIS



Blood sample HVB



TREATED PATIENT WHO
ONCE SUFFERED WITH RA

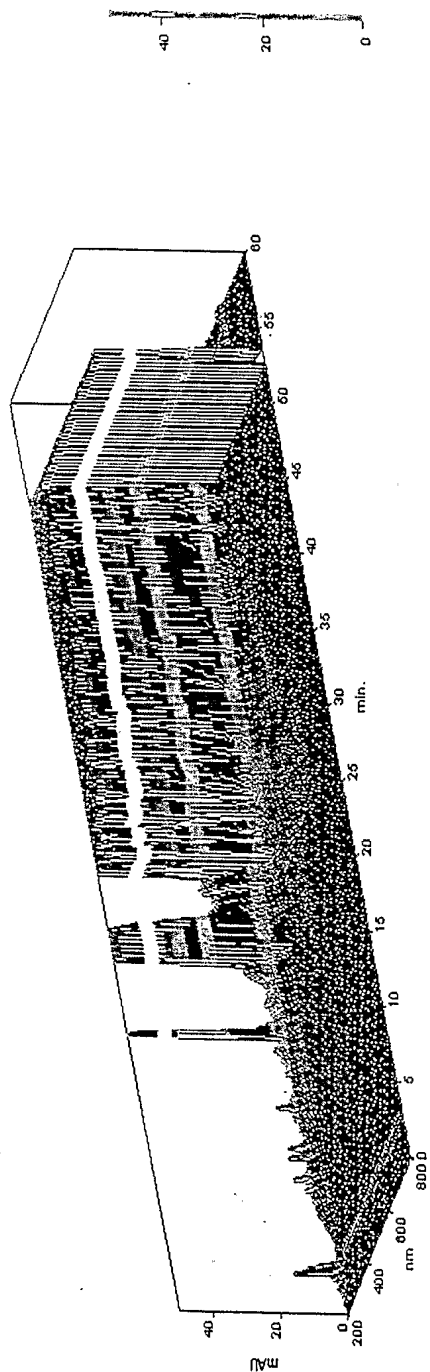
PATIENT WHO
HAS MILD RA

(RNP Singh)

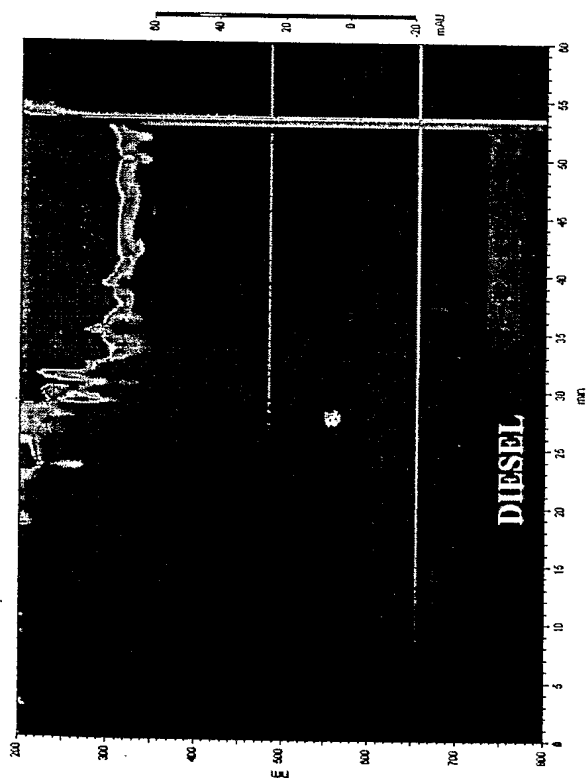
FINGERPRINTS OF HYDROCARBAN FUELS

FIG 127

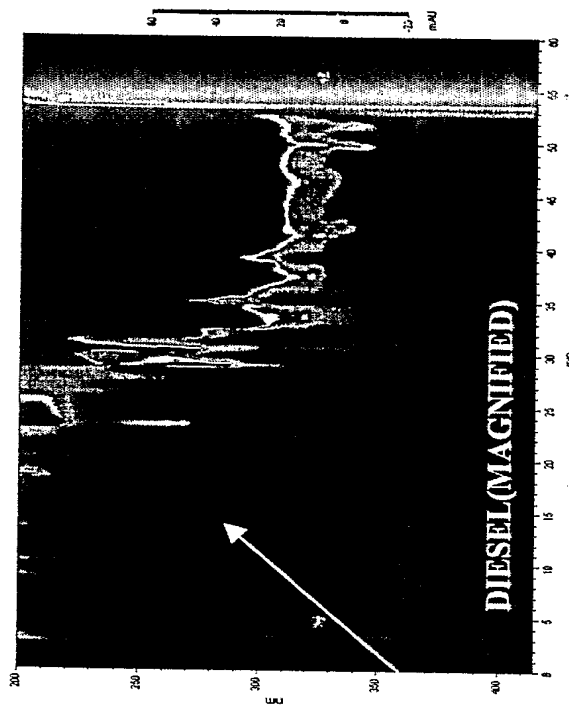
C:\CLASS-VP\IIC\T1 ETHANOL EXTRACT OF DIESEL :



DIESEL



DIESEL



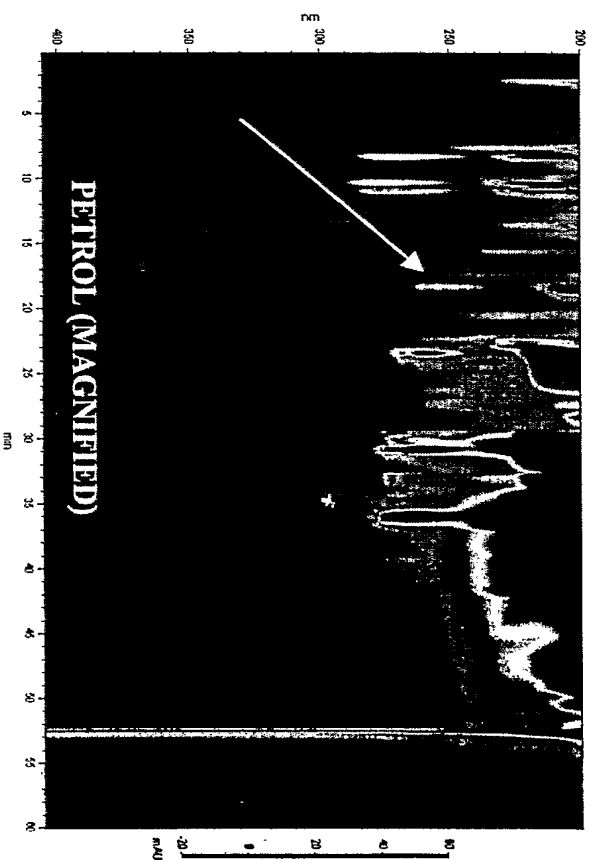
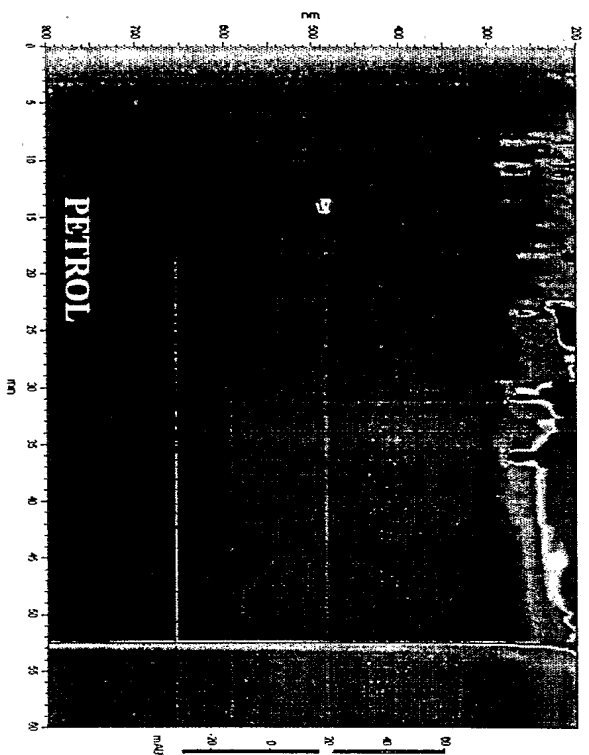
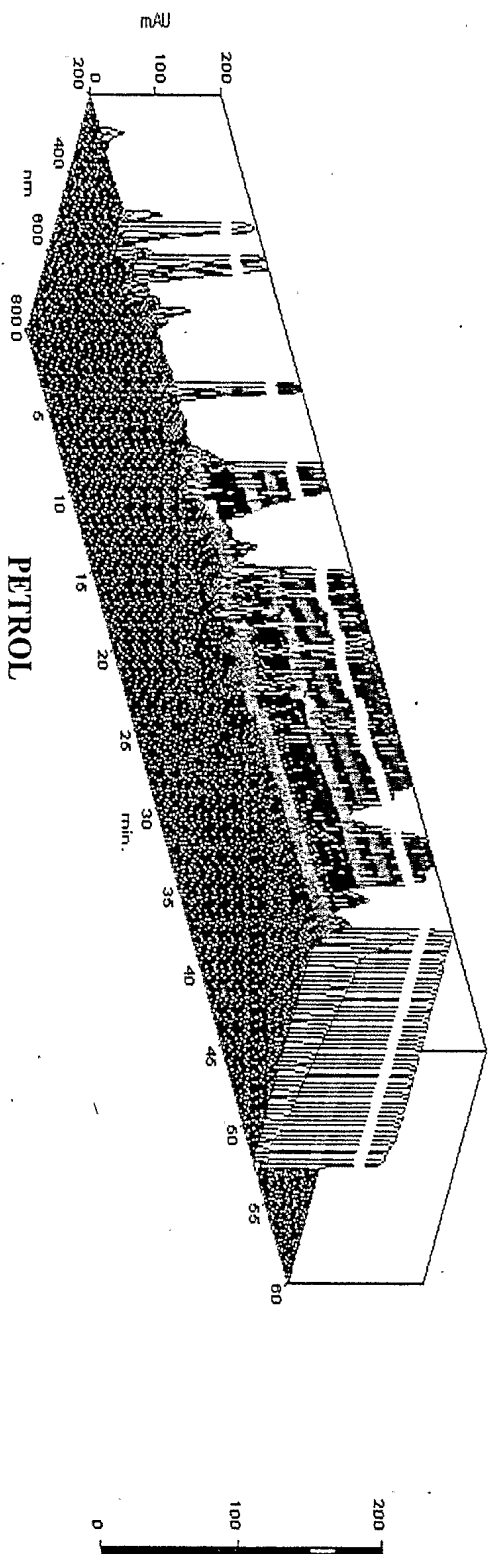
DIESEL (MAGNIFIED)

(Handwritten signature)
 (20/5/2019)

FINGERPRINTS OF HYDROCARBAN FUELS

FIG 128

C:\CLASS-V\P101071.ETHANOL EXTRACT OF PETROL

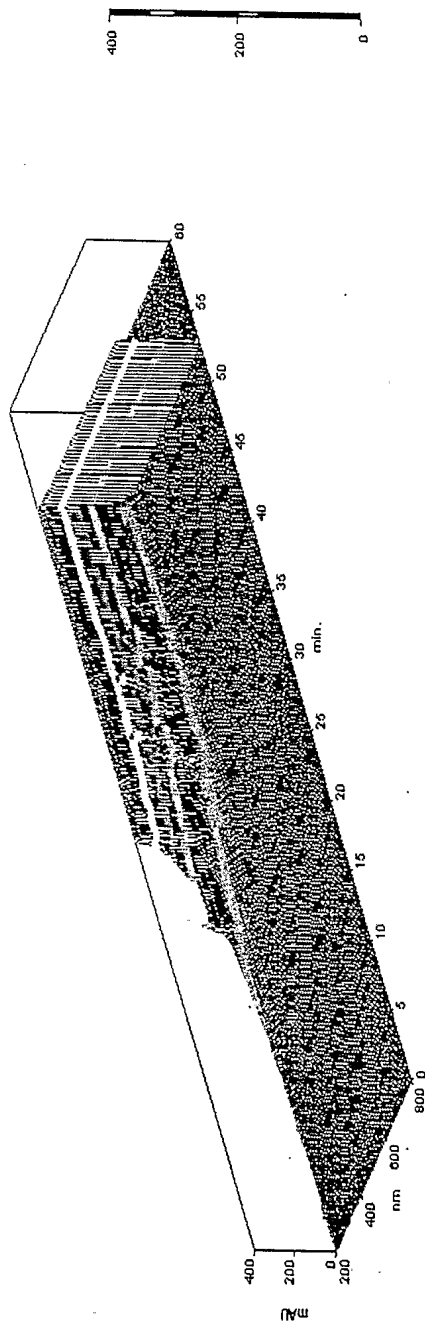


Handwritten signature: (GND Simo)

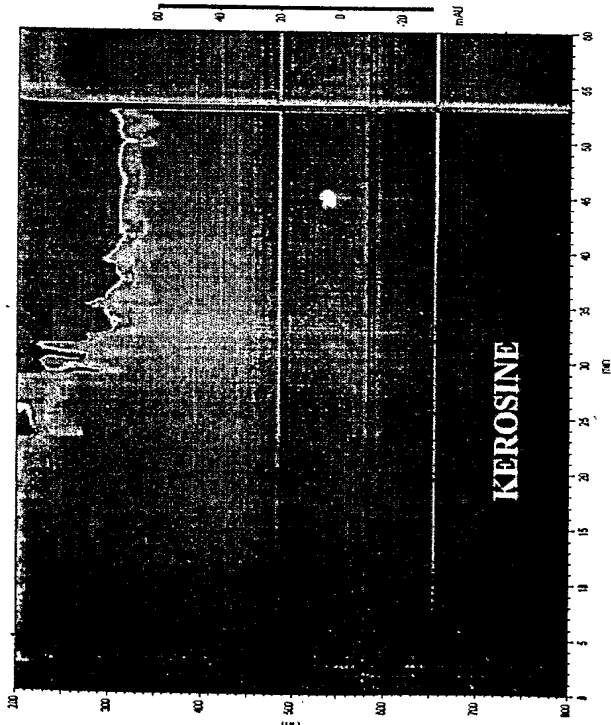
FINGERPRINTS OF HYDROCARBAN FUELS

FIG 129

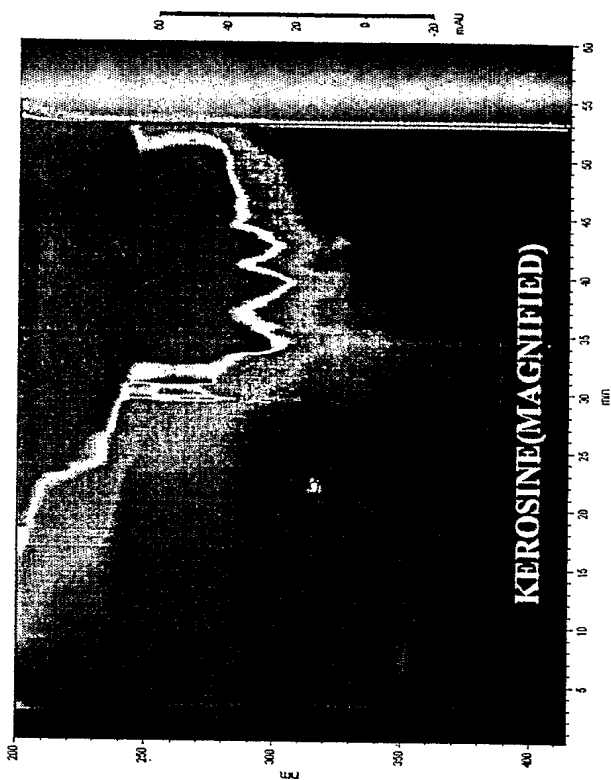
C10CLASS-VPIUCT11 ETHANOL EXTRACT OF KEROSENE



KEROSENE



KEROSENE

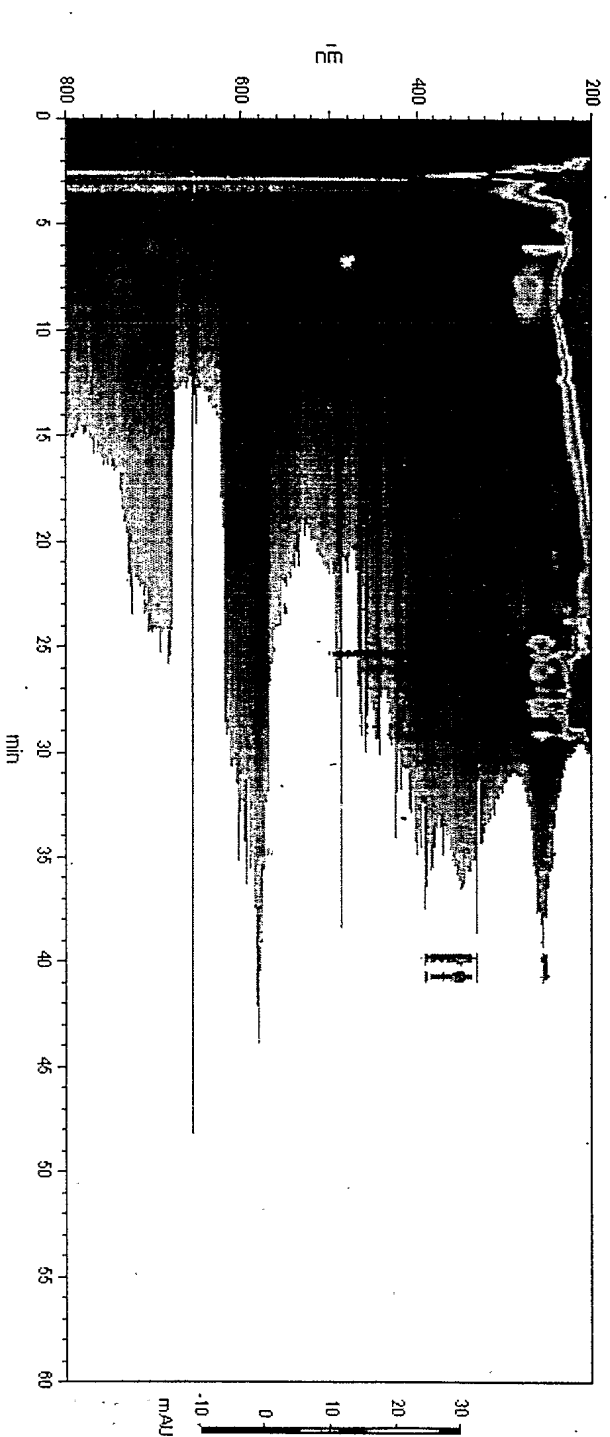
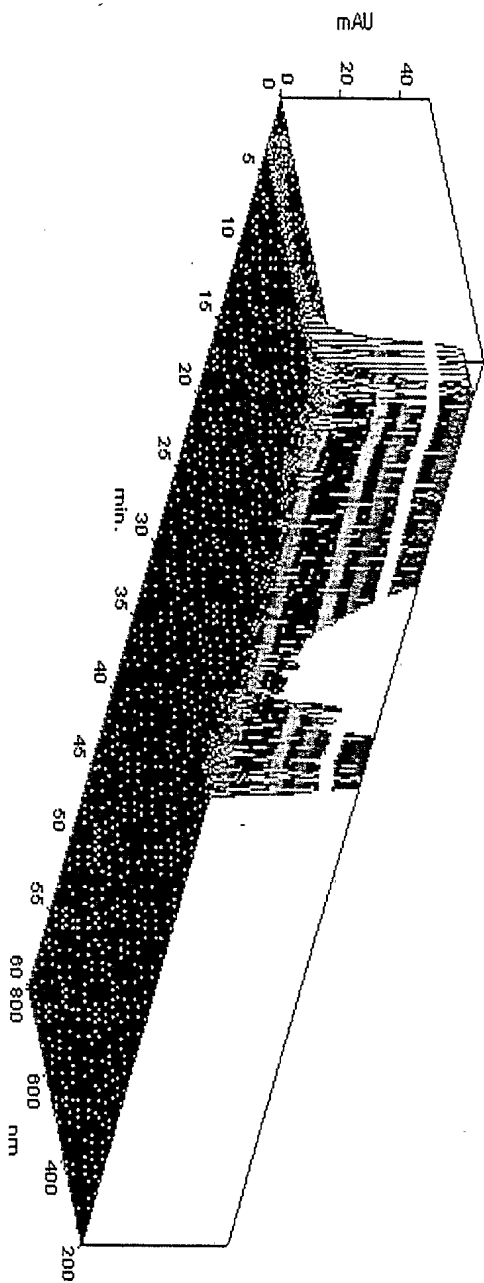


KEROSENE(MAGNIFIED)

(RNG Sample)

FINGERPRINTS OF REACTION REAGENTS BORON TRIFLOURIDE ETHYL ETHERATE H:M. BORON TRIFLOURIDE ETHYL ETHERATE

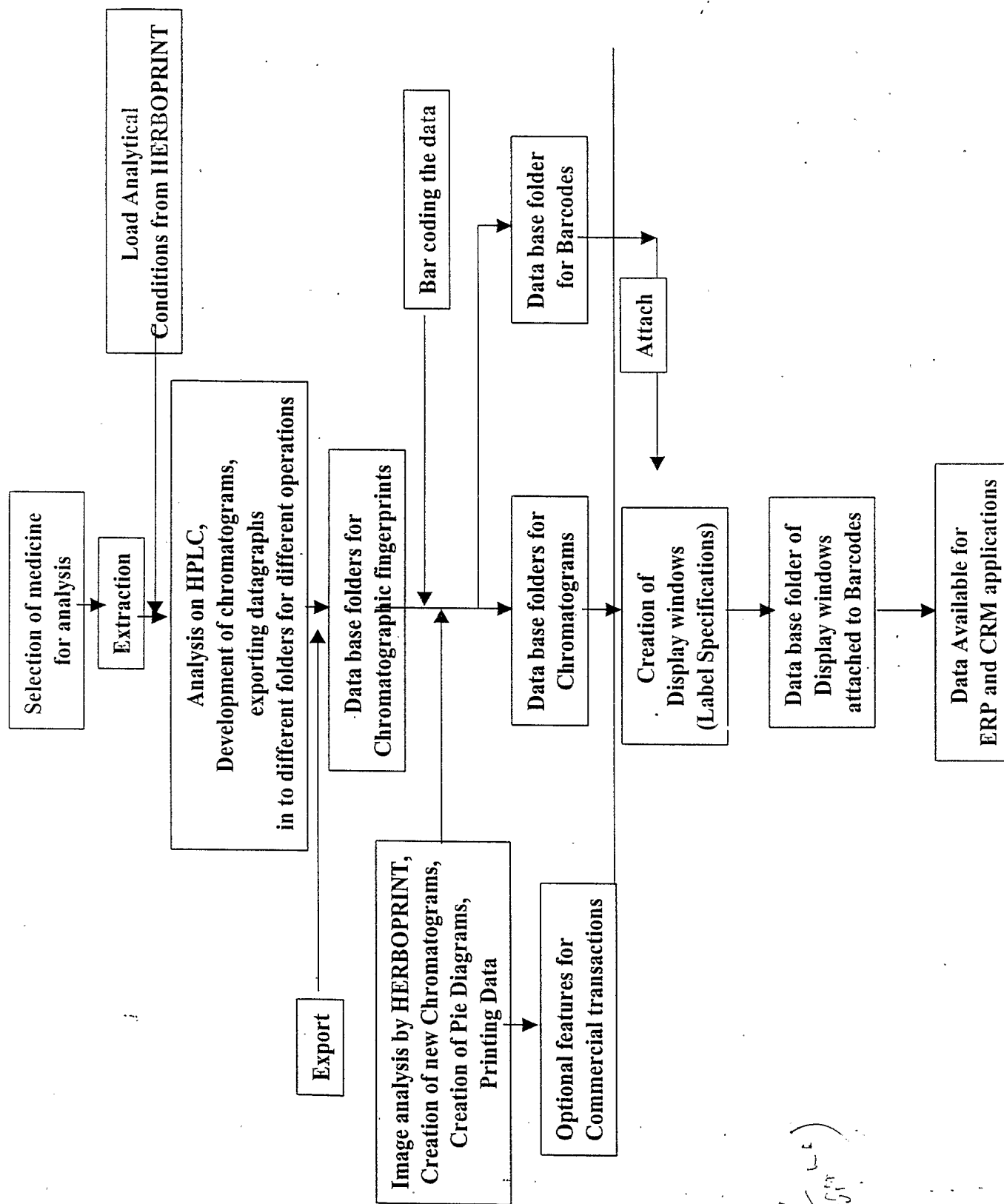
FIG 130



Handwritten signature
(RMS 10/10)

Operation Flow Sheet of Herboprint Software

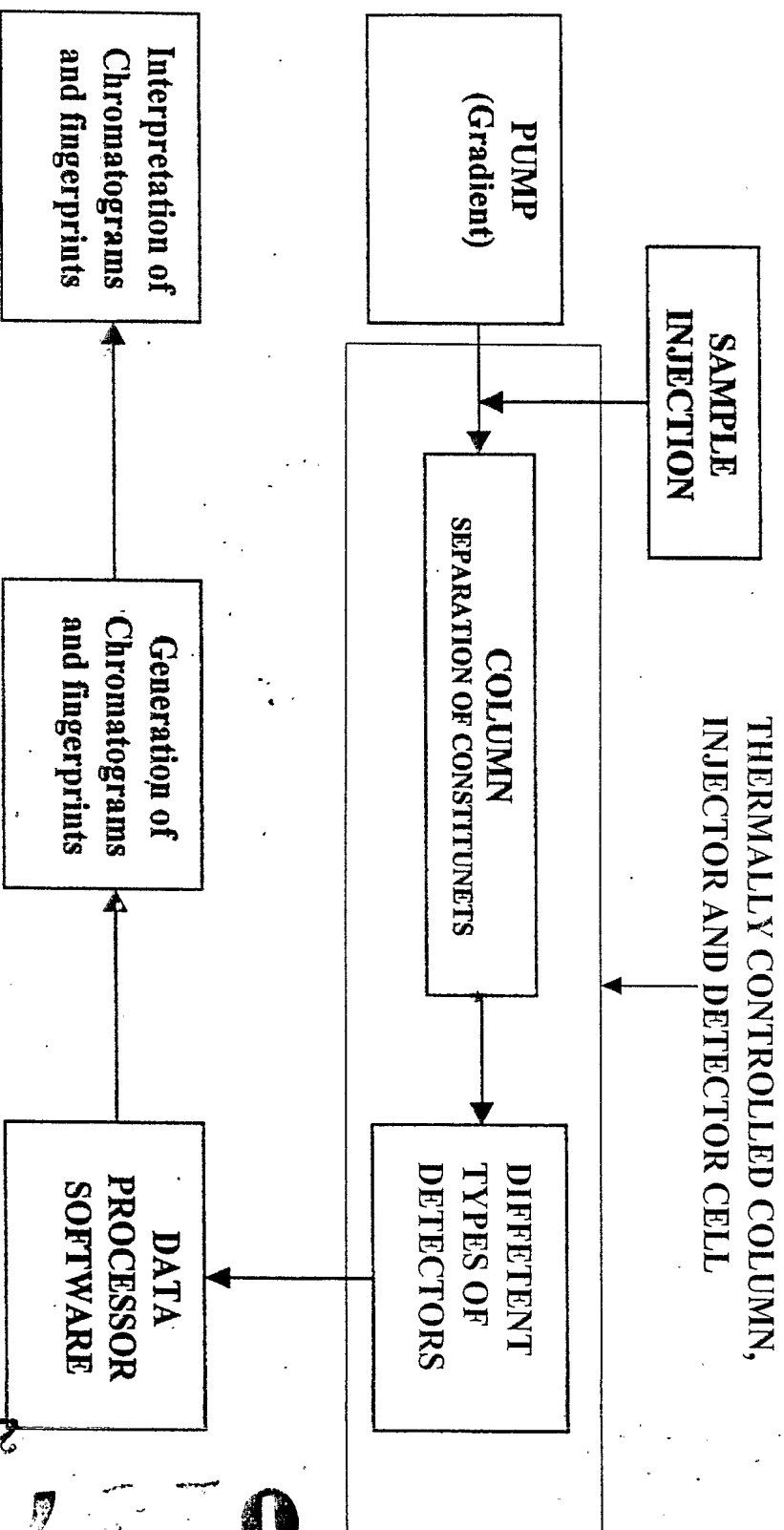
FIG 131



Handwritten signature and date:
 27/10/2011
 P. K. S. R.

SCHEMATIC DIAGRAM OF CHROMATOGRAPHIC SYSTEM

Fig 132



(Handwritten signature)
RN P. Singh

PCT/IN2005/000034

